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ORIGINAL ARTICLES.

NASAL SYPHILIS WITH EXTENSIVE LESIONS.*

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The case reported in detail in this paper, is intensely interesting on account of the extensive lesions produced by the disease, occurring nine years from the date of the primary infection, and because of the results obtained by the free use of mercury and potassium iodide, especially the former drug, in various forms.

The history of the case is as follows: A. S., aged thirty-two years, white, occupation wood carver, a native of Pennsylvania, was admitted to the Surgical Clinic of the Union Mission Hospital, May 29th, 1895, complaining of intense frontal headache, oedema and inflammation of the conjunctiva, and with the eyelids closed on the right side of the face. There was an inflammatory swelling in the region of the right malar bone, which he said would disappear and recur at irregular intervals. He described the pain as sharp and shooting in character, resembling neuralgia.

The pain and the swelling under the right eye were the initial symptoms, and were first noticed by the patient in the early part of January 1895. Dr. Isaac

Leopold examined the affected eye and found an abscess on the lower lid. This was evacuated by an incision commencing below the tarsal cartilage on the mucous surface of the lid. When a probe was passed into the abscess cavity the superior maxilla above the canine fossa was found to be necrosed, and from the symptoms present, a diagnosis of antrum disease of specific origin was made provisionally, no history of syphilis being obtainable.

June 3d, 1895, under chloroform anaesthesia, an incision was made in the right cheek immediately below the orbit, and the antrum of Highmore was opened. A second entrance was obtained by removing the right canine tooth and with a stout probe pushed into the maxillary sinus, a counter-opening made. The antrum was found full of debris and purulent matter. The walls were thoroughly curetted, and a rubber drain inserted through the tooth cavity, coming out at the point of incision in the cheek. The evening temperature on the day of operation was 101°, never at any time subsequently, rising above this point.

June 4th. The wound was redressed,

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and the antrum was sprayed with peroxide of hydrogen, followed by thorough cleansing with sterile water. The conjunctiva was still cedematous and a few drops of pus were present around the opening in the cheek.

5th. Two large sequestra and numerous crusts were removed from the left nostril. After the nose had been cleansed with peroxide of hydrogen, a large perforation of the septum was visible, the right antrum communicating with the nasal cavity.

6th. The wound was dressed and washed as before. Patient showed great improvement, the eyelids being fully open. An hypodermic injection of eight minims of grey oil was given in the back.

10th. Improvement continued. The drainage tube was partially removed.

A few days after, the drainage tube was entirely removed, and a new drain consisting of twelve strands of silk-worm gut was inserted. This was gradually reduced to three strands before complete cicatrization occurred. Throughout the period of drainage, the antrum was sprayed with peroxide of hydrogen and washed with sterile water daily. During this time several small pieces of necrosed bone were thrown off from the opening in the cheek.

September 2d. Since the last date the patient has had five hypodermic injections of grey oil, with no untoward symptoms save a slight rise of temperature a few hours after the injection of the mercury.

About November 1st, the drain was entirely removed, the wound healing nicely. From September until the middle of October, the treatment consisted of hydrargyrum bin-iodide, grain one-quarter, in tablet form, every four hours. At the latter date this form of medication was withdrawn, and he then received a solution of potassium iodide in water (one drop of the solution being equal to one grain of the drug), fifteen grains, three times a day, in conjunction with five minim doses of grey oil as previously given. When this treatment had been discontinued on account of the large number of nodules on the back from the use of the hypodermic needle, the potassium iodide was increased to forty grains, twice daily, but had to be discontinued at the expiration of ten

days on account of the nausea it produced.

The case was referred to me for further nasal treatment, December 7th, 1895. This time he admitted having had a hard chancre on the glans penis, nine years previous to his admission to the clinic. He received treatment for this lesion for about three months, with what he regarded as a cure, nothing remaining on the glans but a cicatrix. He denies ever having a skin eruption of any nature, and says he has been suffering from nasal "catarrh" for about eight years.

On examination, the nose was found to be filled with scabs, muco-purulent material, and necrosed bone. Ozena was so marked that the odor emanating from the nose was almost intolerable, both to those attending him and the patient himself. The wound in the cheek from the previous operation had entirely healed, leaving but a moderate scar. Both tonsils have entirely disappeared, the palatine arch is adherent to the posterior wall of the pharynx, with absence of the uvula and, on the right side, of the fauces. The posterior pillar is also adherent, leaving for breathing and swallowing purposes, a space about one-half inch wide and one inch in length.

The treatment locally in the nasal cavity, consisted in thoroughly removing all dead bone and debris, and washing the entire nasal space with a solution of peroxide of hydrogen. Then cleansing with an alkaline antiseptic solution, and covering the entire surface with a powder composed of two drachms of the mild chloride of mercury to one ounce of boracic acid. He received the local treatment three times a week and, in conjunction with it, was given internally, iodide of potash in thirty grain doses, three times a day; and, as he had been taking the bin-iodide of mercury since his admission to the clinic, it was continued in one-quarter grain doses, every four hours. Improvement was slowly brought about with the treatment named, the iodide of potash being given in gradually increased doses until February 11th, 1896, when he was taking sixty grains, three times a day, with no evidence of iodism.

During this treatment, and previous

to it, the following cartilages and bones were removed from the nasal cavity, in part or whole: The right palate bone came away entire; the vomer was also removed in the same way; all the turbinals and various parts of the vertical plates of the ethmoids were necrosed and removed in pieces of different sizes. The cartilagenous septum gradually disappeared, leaving only the extreme anterior portion, situated near the nasal tip, unaffected by the morbid process.

February 18th. The nasal fœtor had completely disappeared, and the man stated that he felt in perfect health, having gained forty pounds since May 29th, 1895. There is no excessive nasal or pharyngeal discharge, and the entire nasal cavity is clean and covered with a

normal mucous membrane. Looking through the anterior nares, the sphenoid bone is plainly visible; and on both sides, but especially the right, the antrum of Highmore can be distinctly seen.

Despite the great destruction of tissue essential to the conformation of the nose, there was very little depression of the bridge, only a slight "falling in" at the junction of the nasal bones with the septal cartilage. No doubt there will be more marked nasal depression (constituting the saddle-back nose) at some future time.

The patient was instructed to continue the mercury and potash until signs of their constitutional effect appeared, or until all evidence of an active morbid process had ceased.

KOLA.*

WILLIAM C. PIERCE, M.D.,† WILMINGTON, DEL.

One of the most interesting articles of the present materia medica, whether viewed from a commercial or a therapeutic standpoint, is Kola, the seed of *Cola Acuminata*, of the Natural Order, *Sterculiaciæ*.

Attracted by the claims made by physicians of eminence, both in this country and in Europe, the writer has made researches in the literature available upon this subject, and is encouraged to present a series of notes in this paper.

Not the least remarkable fact in connection with the history of Kola, is that its priceless qualities should so long have been practically unknown to the civilized world. From time immemorial, Kola has been employed by the aborigines of western Africa, between Sierra Leone and the Congo, for the purpose of relieving the sense of fatigue due to long-continued muscular exertions.

The first authentic account in regard to it appears to have been made by an

Arabic physician, E. L. Ghafeky, who lived in Spain during the first half of the twelfth century. In 1248, Ibn El-Berthar, a distinguished Arabian botanist, referred to a plant which is probably the Kola tree. From 1445-1486 a most lucrative monopoly in its sale was established by Portuguese traders.

One of the first English physicians to call the attention of his countrymen to the dietetic and therapeutic value of Kola, was Dr. Daniels, who related how, when he was in garrison at Fort Christiansburg, on the Gold Coast, he and his European comrades suffered from local relaxation of the mucous membranes and other visceral structures; and how he and they cured themselves of these ailments by following the example of the natives and using Kola. Learning of these reports, Mr. Thomas Christy, of London, one of the most advanced of drug scientists in Great Britain, obtained samples of the seeds from Africa and sent them to various investigators, including Professors Hertsel and Schlagdenhauffer, of Marseilles, France, and Mr. Stearns, of Michigan U. S. A. The investigations of Hertsel

*A paper read before the Society of Natural History of Delaware, April 6, 1896.

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and Schlagdenhauffer, in 1882, gave Kola a standing at once in scientific circles, although their exhaustive monograph of 400 pages, published in 1883, attracted but little attention in America.

The tree Kola (*Cola Acuminata*) grows wild very generally upon the western coast of Africa, between Sierra Leone and the Congo river, and is found as far as 600 or 700 miles inland. The Cacao and the Kola belong to the same natural order (*Sterculiacæ*). The habits and characteristics of the two are very similar, and both affect low, warm situations. The Kola resembles our chestnut tree and attains a height of sixty feet or more. The tree yields at the best 100 quarts of nuts in a year. It blossoms and bears all the year round, but the fruit is gathered but twice a year, in Spring and Fall, as we know these seasons. The pods contain from one to ten seeds or nuts apiece. The nuts resemble our horse-chestnuts. Their coats are purplish-red in color, and the flesh within is sometimes a pale red, sometimes a greenish-yellow approaching white. They possess a bitter, somewhat astringent taste.

The Kola nut contains almost as much caffeine as coffee (about $2\frac{1}{2}$ per cent.), as well as a small amount of theobromine and a chemical substance known as kolanin. Scientists state that the stimulant in Kola is not the caffeine, for that effects the brain rather than the muscles, and invariably is followed by depression. The negroes working on the coffee plantations use the Kola in preference to the coffee-bean, which contains more caffeine. It is deemed certain that the stimulant is the kolanin.

Under the influence of the Kola nut, negroes have been known to carry a heavy load forty-six miles, under the blazing tropical sun, and without food or drink. A letter from the British consul at Bahia, to Lord Saulsbury, says that a load which eight Brazilian negroes can with difficulty carry, is borne by four African porters, cheerfully singing and chanting as they trudge along, each with a bit of Kola in his mouth. It is related that a negro in the Congo carried a bag of sugar weighing 179 pounds on his head for twelve miles,

and attributed his strength to the Kola nut which he constantly chewed.

The negroes have a superstitious regard for the Kola and attribute all sorts of extraordinary qualities to it. When a young bachelor goes courting, he sends his black inamorata some white Kola seeds. If she sends back a white one, he orders the wedding feast; but if a red Kola comes in its place, he looks for a wife elsewhere. When a negro in the Congo presents one with a handful of Kola nuts, he is paying the highest compliment and assurance of friendship at his command. All sorts of social and semi-religious observances cluster about the Kola nut among those simple folk. The Mohammedans declare it to have been brought by the Prophet himself from Paradise, to protect mortals from the Devil and all sorts of diseases. Certain tribes swear upon the Kola as the most sacred object known to them. Frequently the Kola nut has served as money, and the natives of Africa undoubtedly would prefer a candidate on a Kola platform to the most persuasive advocate of silver or gold.

Other nations have transplanted the Kola tree successfully. Already it has been acclimated in the West Indies, Brazil and other South American countries; and the French are cultivating it successfully in their colonies of Guadeloupe, Cayenne, Cochin China and the Gabon. So far, in this country, it has been grown only in botanical gardens at Cambridge and at Washington, D. C.

In modern times, little attention has been paid to Kola until very recently, although Attfield had announced that it contained 2.13 per cent. of caffeine. In 1882, Hertael and Schlagdenhauffer confirmed this statement, and said that in addition to 2.35 per cent. of caffeine, they had discovered .02 per cent. of theobromine. It is to these two French savants that the honor of having studied in detail the chemical composition and medicinal properties of Kola belongs.

Chemical research proves, therefore, that Kola contains a large percentage of caffeine (the active principle of tea and coffee); also theobromine, the stimulating principle of cacao. But not to these alone are its remarkable virtues to be credited, as further investigation

proves that the fresh (undried) Kola nut contains a peculiar active principle (glucoside) found in no other drug, to which the name of Kolanin has been given. Experiments seem to prove that the marvelous action of Kola in the human organism is due to this peculiar principle, found abundantly in the fresh nuts, but not in those that have been dried. The kolanin is wholly, or in part, decomposed into caffeine during the process of drying.

The success which has attended the use of Kola by army authorities of England, France, Germany, and recently, (April, 1895), by the United States at Fort Sheridan, Ill., by the French Alpine club and by college athletic trainers, has attracted the attention of the leading medical scientists of the world. It has been shown that the African Kola nut has positive power in conserving nervous and muscular energy, thus enabling those who use it to undergo great exertion without fatigue. Advantage is taken to make practical application of these virtues for man's benefit as a medicine, and several preparations made by chemists from the fresh nuts are agreeable tonics and sustainers of the nervous and muscular systems.

Numerous experiments could be cited to demonstrate the applications of Kola, but in citing one we feel that we can give a clear idea of the modern utility of what has been practised by the South African negroes for centuries. Charles E. Woodruff, M. D., Captain and Assistant Surgeon, United States Army, has conducted some recent tests at Fort Sheridan, Ill. The following letter explains the nature and results of those experiments:

"FORT SHERIDAN, ILL., April 25, '95.

F. E. STEWART, M. D., PH. G.

My Dear Doctor:—

As you are interested in my experiments with the fresh Kola nuts, and the 'Kolanin' you kindly sent me, I will give you an account of it, prior to a fuller report to be made later. Lieut. F. E. Harris, of the First Artillery, and myself walked to Chicago on April 12th. The exact distance covered is unknown, but will be measured later. It was in the neighborhood of thirty-five miles, and some think a little further by our

route. This distance was made in nine hours, or at the rate of over three and one-third miles per hour. The regular rate for troops is rarely over two and one-half miles, including halts. We experienced no hunger, whatever, and took no food until we returned home at 6.30 P. M. I had no thirst, but he had considerable, probably due to a pharyngitis from which he suffered. I ate two and one-half fresh Kola nuts during the trip, and he took almost ten ounces of 'Kolanin.' We had no training, our muscles were soft, and he recently had an illness resembling influenza and was debilitated from that, so that we think the results very good and speak well for 'Kolanin.' We felt very well after the trip, excepting the soreness and stiffness of the outraged muscles.

"Ten days later I took the same trip without Kola, and, after covering twenty miles or more, I certainly did become very much fatigued, and was quite certain that, though I could have finished the trip, it would have been at the expense of considerable exertion and suffering. I bought on the way some Kola, and noticed after a few doses that pains and fatigue were surely lessened. Under its influence I finished the trip in about the same time as before." * * *

The observations made by Dr. Woodruff, at Fort Sheridan, demonstrated the possibility of marching the troops from the fort to Chicago a distance of thirty-five miles, in nine hours, and having them in fighting trim on arrival.

The use of Kola is also indicated in alcoholism. Dr. James Neish, of Jamaica, says: "For inebriety it is a specific; a single fresh nut ground up, and made into a paste with water or spirits, will cause all signs of intoxication to disappear in half an hour."

As a stimulant in athletic training, it is highly recommended by M. C. Murphy, trainer of the N. Y. A. C., and of Yale College, and by other athletes and trainers. Its use was notably demonstrated last autumn in several prominent foot-ball contests, and in the recent athletic games between our representative athletes and those of England. The Britons acknowledged the superior system of training of the Americans. An important part of this superior system was the use by all our contestants of

African Kola nuts during training. The result was a long line of world-record breaking victories for our boys. Thus it will be seen that the marvelous qualities of this fruit have come to be recognized and applied.

The use of Kola is increasing throughout the Soudan, from Senegambia in the West, to the Eastern region that has of late years come to be more popularly known by that name. The consumption

of Kola is limited only by the means of the consumer and the amount of the available supply. In what may be regarded as the very treasure-house of larder-botanical wealth, Kola has, by universal consent, the first place. Where real delicacies most abound it is deemed choicest of all—every other condiment being by comparison

"As moonlight is to sunlight,
As water unto wine."

AFTER-TREATMENT OF APPENDICITIS.

F. R. MILLARD, SAN DIEGO, CAL.

The surgeon asserts that the old trio, Typhlitis, Paratyphlitis, and Perityphlitis, are out of date, and that each and all of them is appendicitis. He further declares that a differential diagnosis is not only impossible but unnecessary, and that the proper treatment is operation as soon as diagnosed. Further, that most if not all his cases fatal after operation are ones recurrent after apparent recovery under medical treatment, and for these the doctor and not the surgeon should be held in blame.

The doctor has accepted appendicitis, and with it the belief in the impossibility of making a differential diagnosis. But he asserts that but few cases recur, and that fewer still require an operation; and that where necessary, operation usually results fatally no matter how treated.

Now, my grey-bearded brothers, in giving up the old classification of the three "Typhs.", accepting appendicitis, and conceding the impossibility of a differential diagnosis, haven't you conceded too much? How many of you, when you had your first case of aphasia, could put your finger on the skull and say, the trouble is right under here? Or when you had your first case of Jacksonian epilepsy, could say, that this convolution of the brain is injured? Thanks to a few men who would not accept as final the decision that diagnosis is impossible, you can now locate those centers with as much confidence as you

do the valves of the heart. Had you held to the old classification, and in conjunction with the surgeon worked for a differential diagnosis, it is very probable that we could now say of this case, it will almost certainly die, or recur, and could call in the surgeon. Of another case we could say, it will almost certainly recover and then appropriate after-treatment will certainly prevent recurrence.

Some thirty-two years ago, after having conducted two cases that had been diagnosed as perityphlitis, to what was considered a successful termination, a boy came under my care with a sinus of long duration. The case had been diagnosed as Pott's disease of the spine. But from the history as learned from the boy, his father, and the doctor who had treated him, it was a perityphlitis (or according to the new nomenclature of diagnosis made easy, appendicitis) in which the pus had fortunately escaped externally. While using means, now coercive, now conciliatory, to induce the microbe to vacate and allow the sinus to heal (which it often promised to do and then willfully, wickedly and with malice aforethought broke the promise) both my former cases recurred.

This accumulation of disasters gave me more trouble than the last Congress did the President of the United States. For while he was serenely confident of his own infallibility, I was haunted night and day with the idea that I had erred in not having pursued any after-

treatment, and so had imperiled the life of a dear friend whom I wished to save for friendship's sake, and the life of a dear enemy whom I wished to save for future punishment. Fortunately both patients recovered. When the acute stage was passed, both were given a supply of tincture of iodine, a camel's-hair brush, and a box of belladonna ointment. They were directed to paint the tincture over the affected region every four hours, until it became quite painful; then to omit, and apply the ointment two or three times a day, until the cuticle was all peeled off; then to wash thoroughly and repeat the process; and so continue repeating for six weeks. Each was also given four dozen pills, and directed to take two one night, and one the next; omit one night, and repeat the next; and so keep repeating until all were taken. The pills were the U. S. P. Comp. Cath., except that the gamboge was left out, and $\frac{1}{2}$ gr. each of ext. belladonna and ext. nux vomica added.—By the way, I like this modified pill very much, and think there are but few if any cases in which it cannot be substituted for the U. S. P. pill with advantage to both doctor and patient.

Proportioning the dose to the age and condition of the patient, this after-treatment has been pursued in all such cases treated since, and so far as I know no one so treated has had a recurrence. One of those treated after the recurrence in 1865, was living a few weeks ago, and the boy who had the sinus is a lusty grandfather. The shortest time any one has been under observation after treatment is four years. While the dose of the pills should not be too large, it should be large enough to be effective.

The up-to-date operating surgeon, who, when he finds in the human body an organ the absolute necessity for which has not been demonstrated, concludes that its retention is one of the mistakes of Moses which it is his own mission to correct, will be likely to say the treatment is unscientific. But is it certain that the last thing is known about the appendix, either in health or in disease? It is very likely that before that last thing is known, the surgeon will have resurrected the old trio of "Typhs"; or else made a new

classification by which he can make intelligible, if not the origin of the appendicitis, the course the disease has taken to produce the varying conditions he finds at the operation.

I cannot say that this line of treatment has never disappointed me. In 1891, M. B., an Italian rancher, living twelve miles out, and whose family doctor I had been for ten or more years, came in and said, "I want you to look at a lump in my belly."

I found an oval-shaped tumor in the region of the appendix, apparently about four inches long, quite tender under manipulation, but fluctuation could not be affirmed. He said that two years before he had the worst colic he had ever had. Thinking it unmanly to call a doctor for such a baby disease as "belly-ache", he resorted to the Italian panacea—infusion of salts, senna, and manna—in what to Americans seem enormous doses, and added "wizard" locally and internally. He did not go to bed, but it was some time before he was able to work. About a year later, he had another attack which sent him to bed, and lasted longer. He added to his former remedies, hop fomentations and castor oil, and after a while got out again. But the lump did not go away, and as soon as he was able to ride he came in to see me. He learned that I was confined to a dark room with Iritis for company, and by the time I got out, it troubled him so little that he said nothing about it. But it was always there. The next year his old acquaintance returned with reinforcements. He refrained from sending for me because he knew I would not visit outside patients, and he feared that if I knew how ill he was I would send some other doctor to see him. Besides he considered himself something of an expert in doctoring "belly-ache", and determined to fight it out on the old lines if it took all summer, or to die. At one time he expected to die, selected the priest he wished to bury him, and made arrangements to have a suitable number of masses said.

His appearance showed that the fight had been a hard one. He was certain another attack would kill him, and wanted me to prevent it. He was told an attack was liable to recur at any time, was almost certain to recur sometime,

and that the only cure was an operation. He was advised to go into a hospital and have it done immediately. He declared an immediate operation absolutely impossible, but if recurrence could be prevented for a couple of months, he would then have it done if I thought it best. Extracting a promise that if the pain returned or the swelling increased, he would not delay an hour in calling a competent surgeon, he was given the usual prescription. When he had taken the last pill he came back and said the lump was gone, and he never felt better in his life. A careful examination failed to reveal a vestige of his former trouble.

He wanted another box of pills, saying he thought he would take one or two doses a week for a few months. He was examined recently and nothing found.

Had it been his first attack, the advice would have been to try the treatment before resorting to an operation. But the advice given was given conscientiously, and the result of the treatment was a double disappointment. First, that a tumor in that location which had existed there more than a year, should so quickly disappear. Second, the Italian has lost his complete faith in the infallibility of my judgment, and now ranks me below his favorite priest.

ABDOMINAL DRAINAGE.

MORDECAI PRICE, M.D., PHILADELPHIA, PA.

There has been no period in the history of abdominal surgery when Pennsylvania has not claimed, and with good grounds for the claim, to have masters in the work. The Atlees, in their day, were unquestionably leaders and pioneers in this work, and could they have had the drainage tube, they would surely have taken the glory from the latter half of the Nineteenth Century.

My first lessons in abdominal surgery were received from the hands of Washington L. Atlee. I have seen him operate in a number of uncomplicated cases and always with success, and I have time and again heard him, when asked what was found in case of death, answer, "blood and serum." Could he have had the help of the glass drainage tube, we cannot estimate what advances he might have made. The difference, in fact, between the surgery of MacDowell, Sir Spencer Wells and the Atlees, and the surgery of to-day is only possible by use of the drainage tube.

Philadelphia has always prided itself on the perfection of its surgery of every description, but especially abdominal surgery. It has always prided itself on the perfection of drainage; that its surgeons knew how to drain, and

almost without exception its surgeons use the glass drainage tube. I thought that the question of drainage had been settled, not only in Philadelphia, but that abdominal surgeons throughout the world had been convinced of the usefulness and indispensability of the glass drainage tube. On account of this, I give the reasons that in my own work, influence the matter of drainage.

It has been stated recently that the glass drainage tube is fast passing out of use. This can be true only with surgeons with whom I have no acquaintance. Wherever drainage is necessary with us, glass is preferred if it can be used. In all pelvic and complicated abdominal operations, it is used almost without exception where drainage is indicated. Where there are no complications, no bleeding, no pus, no peritonitis, drainage can serve no good purpose. A justly celebrated surgeon says that drainage of the abdominal cavity is an expression of the present imperfect state of surgery. I would state that, in my opinion, the glass drainage tube is a very emphatic expression of the perfection to which surgery of the abdomen has been brought. Without such drainage this surgeon might as well expect us to perform the perfection of surgery in

the desperate cases that come into our hands, as to expect a carpenter to make a perfect piece of furniture from rotten wood.

Perfect surgery is that surgery which saves life. To deal with complicated cases, without a single anatomical feature of the abdominal contents recognizable, with bowel adherent, thickened, indurated and necrotic, attached to a tumor undergoing pathological changes from twisted pedicle or other complication, conditions which are rapidly killing the patient, we must remove such growth. To operate and save life is a triumph of surgery; ninety out of a hundred cases such as these would die without drainage; as it is ninety-five out of a hundred recover with it.

The indication for drainage is the possibility of poisonous material being left in the peritoneal cavity. Any fluid, pus, blood, serum or debris from any pathological condition will become poisonous if left in the peritoneal cavity. We know the power of the peritoneum to digest and take care of almost anything left in the peritoneal cavity when it is in good working condition, but the surgeon dealing with conditions that often accompany pathological growths and changes in the peritoneal cavity, does not find the peritoneum in a condition to be trusted with this important work. He therefore uses drainage, glass drainage, to guarantee the safety of his patient.

Glass drainage can only be accomplished with certainty when the surgeon comprehends just what he proposes to do with the drain. A glass drainage tube should be of small calibre of such length as to reach the most dependent point to be drained. It should have openings, the very smallest possible, to admit the fluid into the drain. Its end should be open. No portion of bowel should be under it. If there are two points in the pelvis or in the region to be drained, which cannot be emptied and drained by one tube, two or more tubes should be used. I have seen this necessary only in two or three cases among several thousand operations requiring glass drainage. I say this of my own work, and that of Dr. Joseph Price, whom I have had the pleasure of assisting and of watching his cases for many years.

The drain should be cleaned by a long-nozzled rubber syringe, and the tube kept perfectly clean. Immediately after operation, the tube should be cleaned every twenty minutes or half-hour. As the discharge diminishes, the time should be lengthened from one to two hours. When the discharge becomes but slightly blood-colored serum, and from one to two teaspoonfuls only removed during the half-day, the tube should be removed. The tube also should be raised about a quarter inch every six hours during its stay in the abdomen, and a half rotation of the tube should be made at the same time. If glass drainage remains over thirty-six hours, it should always be followed by a small rubber drainage tube, with several holes near the end of the rubber, and, after perfect cleaning of the glass tube, the rubber passed through the glass tube to its very bottom, and the glass removed over it. This rubber tube should be removed twice daily, thoroughly scalded and passed back to within an inch of where it was before. Very few dressings will remove the rubber, the drainage track will have closed from the bottom, and there will be no further trouble. This procedure is necessary after the use of glass drainage to make sure that no pocket is left at the bottom of the drainage tract. When drainage is used only from twelve to thirty-six hours, this precaution is unnecessary. No dressing of the mouth of the drainage tract, save to keep it clean.

I have seen gauze used but two or three times at the same time that glass drainage was used. I do not believe that it is an additional safeguard. On the contrary, I believe that it complicated the drainage.

It has been stated by a quite prominent operator that a glass drainage tube did not drain; that in a very few hours the drainage tube was encapsuled in lymph, and that the peritoneal cavity was shut off. To the contrary in my experience it has been clearly proved that it does drain perfectly, and every part of the peritoneal cavity, provided the operation has been properly performed, and the drainage tube placed in the most dependent position. If this were not so, why would we have free drainage of blood and serum in com-

plicated cases where the enucleation extended throughout the entire pelvis, with separation of the head of the colon, the appendix and a number of feet of small intestines. From all these conditions, the oozing of blood and serum found its way into the hollow of the sacrum and was removed by the glass drainage tube. There is a reason for failure in all badly performed operations. An operator will begin his enucleation and separation of bowel, and leave great pockets, with an impenetrable wall of adherent viscera between the pocket of his enucleation and the pelvis where his drain is placed. To remove a tumor or pathological condition and not separate adherent bowel and omentum, is to leave a condition of affairs to prevent the serum and blood from finding its way to the drainage tube. Where all adhesions are separated, where the way is left clear for the serum and blood by gravity to find its way to the pelvis, there has never been a case in my experience where every drop of blood and serum and pus was not removed, and the condition of the patient showed clearly from the very start that there was nothing left for the peritoneum to do. I have never seen a failure that I could attribute to the failure of the drainage.

Just at the close of glass drainage it is important in some cases to freely move the bowel, so that as the intra-peritoneal drainage is removed the absorbents will take up the work and continue it. We have for many years ceased to purge our patients immediately after operations with the idea of preventing peritonitis, but often after complicated cases with delayed removal of the drainage tube, purgation is of great assistance.

Those who condemn glass drainage either have not used it correctly, or sufficiently long to appreciate its great advantages. In listening to discussions on this subject, we cannot help but notice the great discrepancies in statements on this subject. One man will remove the glass drain in twelve hours as a routine method. Another, who lays great stress on drainage, states that he cleans the tube personally every twelve hours. He also states that he places the bandages and dressings over end of the tube. Another, that there is danger of infection of the abdominal

wound when exposed in order to dress the tube. Another, that it produces all sorts of complications, fecal fistula, ulceration of the bowel; and, at the same time, he admits that the case was so desperate that he thought it best not to separate the adherent bowel, but removed only that portion of the diseased tube and ovary that seemed to be killing the patient. He therefore places the glass drainage tube in a case in which he has not completed the operation, and has left conditions so that no drainage, no matter how well placed, could save his patient.

The advocates of the gauze drainage make this statement: When the pelvis has been denuded of its peritoneum, and there are many abrasions of bowel and surrounding viscera, a glass drain will not answer; that the denuded portions of the pelvis must be packed with gauze in order that the bowels and surrounding viscera will not come into contact with the raw surfaces. They accomplish this from either above or from the vaginal route. I would simply ask, after the removal of the gauze, what is to prevent the irritated bowel coming into contact with the still denuded portion of the pelvis, for certainly no peritoneum has had time to form during the interval of drainage. If there is any place in abdominal surgery where glass drainage is demanded, where it does its best work, where it saves 95 per cent. of desperate cases, if the operation is properly done, it is in just such cases as the one spoken of above. I have seen it used in just such cases, with adherent and wounded bowel, in a number of cases where the bowel has been resected in the operation and the pelvis denuded of every portion of the peritoneum; ureters laid bare and the posterior face of the uterus denuded to its muscular coat. I have seen these cases recover without a single bad symptom, with no increase of temperature or pulse, with seemingly no systemic involvement of any kind, if the drainage was free from the start.

Some men set a fixed time for the removal of a drainage tube. This is out of the question. Some bad and complicated cases may require drainage only twenty-four hours; others may require drainage from three to four days. There

can be no fixed limit. The requirements of each case is our only guide.

A strong advocate of gauze drainage thus expresses himself: "I have employed the abdominal gauze drain in about fifty cases. In a number of these cases it has proved inefficient, so far as the removal of the fluid was concerned. In some cases its early removal has been necessitated by an accumulation of blood serum. Its removal ordinarily causes severe pain to the patient. In a few cases sinuses have persisted for a considerable time, and in two or three cases ventral hernia has to my knowledge resulted."

A series of disasters of more serious magnitude cannot possibly follow any other mode of drainage save that of gauze. Accumulations of filth, blood, and 6 per cent. of hernia, is certainly not a showing to recommend it to anyone, much less to make an enthusiast of a man. I have never seen any such complication follow the use of the glass drainage tube.

Another observer makes the suggestion to use a large glass drainage tube, and that a rope of gauze be passed through the drainage tube so as to facilitate drainage; to place a stitch through the abdominal wall, so that when the glass and gauze drainage is removed the drainage track can be closed by tying the stitch.

There could scarcely be suggested a more absurd and impracticable procedure, or one that would be productive of more mischief. Free drainage often follows the removal of the drainage tube, and such discharge is welcomed by the operator as evidence of successful drainage. The charge that glass drainage complicates recovery, produces fecal fistula and many other lesser evils, is only proof that the operator is either a bungler, or does not appreciate the fact that he has a wounded or necrotic bowel; and, instead of the drainage tube complicating his case, it is the salvation of his patient by giving a place of escape for feces and gas.

In the hands of experienced operators all these cases recover promptly. I have had them where, at the end of the operation, I expected fecal fistula, and placed glass drainage to guard against it, and thus guarantee the safety of the

patient. The injury to bowel was so low, the necrosis so extensive, that immediate repair was out of the question. Some of these cases escaped fecal fistula, but all recovered by the use of the drainage tube.

"A-boundin' and A-buttin'."

Among our real estate assessors a year or two ago was one named Dennis McElhinney. On his rounds he came to the habitation of his friend Michael Mulcahy.

"Good-mornin', Michael," says McElhinney.

"Good-mornin', Dinnis," returns Mulcahy.

"Its assissin' this mornin' I am, Mike," says the official.

"Then be aisy wid me, Dinnis."

"I'll be aisy, Mike. I'll put yez down for tin dollars a fut. Dat will be t'irty times tin is t'ree hundred fur de lot and twinty fur de goat."

"Phwat!" cries Mulcahy.

"T'ree hundred fur de lot and twinty fur de goat."

"De goat's not rale estate."

"It is so under the new law."

"Go 'way wid yez!"

"I can prove it to yez," says the assessor, drawing out his instructions. "Rade that, will yez? 'Assiss at its proper valuation per front foot all property a-boundin' and a-buttin' on both sides of the strate.' Many's the time I've seen your goat a-boundin' an' a-buttin' on 'both sides of the strate. Twinty dollars fur de goat, Mike."—*New York Herald.*

"Yes, sah," said a darkey evangelist, "Ise preached on creation, justification, sanctification, salvation, and damnation, and I finds it only produces consternation and botheration." "Suppose, Uncle, you were to try a simple text, such as 'Thou shalt not steal'?" "Laud, sah, that would produce frigidation."—*Exchange.*

While poring over a receipt-book the other day, my attention was attracted by a receipt which ended something like this: "Then sit on the front of the stove and stir constantly." Imagine sitting on a stove without stirring constantly.—*Harper's Round Table.*

THE TREATMENT OF ULCERS OF THE CORNEA.*

T. HILLIARD WOOD, M.D., NASHVILLE, TENN.

As ulcers of the cornea are often met with, both in general and ophthalmic practice, I beg to present to this Association some observations on their treatment. The principal measures for the arrest of corneal ulceration are as follows:

- (1). The removal of foreign bodies.
- (2). To arrest any conjunctival inflammation.
- (3). To check the spread of the ulcer by scraping, the actual cautery, and by antiseptics.
- (4). By incision to evacuate the aqueous humor and reduce intra-ocular tension; also to afford an escape for pus confined in the anterior chamber, or between the corneal layers.
- (5). By a bandage to afford protection, support and rest to the thin ulcerated cornea.
- (6). To relieve pain, congestion and lachrymation by atropine.
- (7). To hasten the absorption of pus and other inflammatory effusions by moist heat.
- (8). To stimulate the surface of chronic or indolent ulcers by irritants.
- (9). Counter-irritation by seton or blister.
- (10). Treatment of causative or complicating constitutional conditions.

In the first indication, "the removal of foreign bodies," are included the removal of bodies imbedded in the cornea, of cilia which are directed backward and scratch the cornea, and of papillomata of the edge of the lid when causing friction to the cornea.

The second indication, "to arrest any conjunctival inflammation" is often more important than the treatment of the ulcer itself. The various kinds of conjunctivitis, especially the purulent type, are among the frequent causes of severe corneal ulceration. Indeed, corneal complication constitutes the one great danger in all forms of conjunctivitis. In corneal ulcers caused and accompa-

nied by purulent ophthalmia, the relief of the ophthalmia, by cleanliness, hot or cold applications and nitrate of silver, constitutes the best treatment of the ulcers.

The third indication, "to check the spread of the ulcer by scraping, the actual cautery and by antiseptics" is based upon the rules of antiseptic surgery. These ulcers are often caused by infection, and when not originally caused by it become infected as soon as they occur. These germs may be specific as in ulcers accompanying acute blennorrhœa, or the ordinary pus cocci (*staphylococcus*). The progressive destruction of corneal tissue in ulceration is often caused by micro-organisms. To render the ulcer aseptic is therefore of prime importance. This is done under cocaine anæsthesia by curetting the ulcer, applying the actual cautery, and the use of iodoform either in powder or in a salve.

An excellent and convenient substitute for the actual cautery is pure carbolic acid. This was first suggested by the late Dr. E. Williams, of Cincinnati, and has often been used by myself with the happiest results. The application of the actual cautery or even of pure carbolic acid to a cornea thinned by ulceration may seem severe, but the wisdom and success of the measure are often shown by the immediate subsidence of the pain and irritation, and by the healing of the ulcer. There are many progressive ulcers which will yield to nothing else, but which are rapidly cured by scraping, cauterization and iodoform salve. To those who have not personally tried these measures, I beg to insist upon their superior virtues.

The fourth indication, "by incision to evacuate the aqueous humor and reduce intra-ocular tension; also to afford an escape for pus confined in the anterior chamber or between the corneal layers" is to follow the suggestion we gain from nature. It has often been noticed when ulcers progressed to perforation that they immediately began to heal and got

* Read before the Medical Society of the State of Tennessee, Chattanooga, Tenn., April 14, 1896.

well. Upon this observation is based the practice of perforating the cornea at any point in its field, or as is often done, directly through the base of the ulcer. This paracentesis, by allowing the aqueous to escape, relieves pain, reduces tension, favors osmosis in the corneal layers and promotes healing.

The fifth indication, "by a bandage to afford protection, support and rest to the thin ulcerated cornea," is of much value. By the bandage the lids are made to splint the weakened cornea and prevent staphylomas; the constant friction of the ulcer from the batting of the lids is stopped and pain relieved; and any antiseptic salve put in the eye is kept for a much longer time on the ulcer.

But the bandage cannot be used in infants, nor should it be employed where there is much pus formation, as in acute blennorrhœa, because it defeats drainage. Again, there are cases which do not seem to tolerate the bandage, and where the symptoms are all aggravated by it. In such cases the bandage should be discontinued.

The sixth indication, "to relieve pain, lachrymation and congestion," is met by a solution of atropine. Atropine does not seem to affect either for better or for worse the ulcer itself, but it does greatly relieve the irritation and contributes to the patient's comfort. Moreover, in all severe ulceration of the cornea there is always danger of iritis, and to prevent or cure this, atropine should be used.

Eserine is by some used in corneal ulceration, especially with ulcers near the corneal margin. But while it may reduce intra-ocular tension and so favor the healing of the ulcer, yet the danger of iritis from its use seems to me to contraindicate its general employment.

The seventh indication, "to hasten the absorption of pus and other inflammatory effusions by moist heat" is best met by the interrupted use of cloths wrung out of hot water and applied to the eye. This moist heat acts favorably in many ways. It greatly relieves pain and photophobia and is very grateful to the patient; it hastens the absorption of pus, whether in the anterior chamber or between the corneal layers; and is a valuable stimulant in many of the chronic ulcers occurring in old age.

The eighth indication, "to stimulate the surface of chronic or indolent ulcers

by the use of irritants" is met by the use of Pagenstecher's ointment, composed of yellow oxide of mercury gr. ii to vaseline 3i. Another good stimulant is diluted tinct. opium dropped in the eye twice daily. But those stimulants are irritants and should not be used in the acute stage of sthenic ulcers.

With the ninth indication, "counter-irritation by setons or blisters" I have only a limited acquaintance, as they have seldom been necessary in my experience. I have occasionally had good results in chronic cases from small repeated blisters on the temple, but have never used the seton. If all other measures are faithfully carried out I believe that such a disagreeable remedy as a seton in the nape of the neck will seldom be necessary.

The tenth indication, "the treatment of causative or complicating constitutional conditions" is last but not least. The cornea being removed from direct blood supply receives its nourishment by absorption. Hence in depraved constitutional conditions it is one of the tissues most likely to suffer. For this reason we have ulcers accompanying diathetic and asthenic conditions, as for example in struma and in Asiatic cholera. The general treatment should meet the special constitutional requirements, and will include alteratives, tonics, nourishing food and out-of-door exercise.

Of the foregoing measures it is not supposed that all of them will be used in every or any case. The physician must from them select the ones best suited to any special case. But of these measures I firmly believe that scraping the ulcer, cauterizing it with actual cautery or pure carbolic acid and dressing it with iodoform salve and applying a bandage, will relieve more cases than any other one remedy proposed.

DISCUSSION.

DR. B. F. TRAVIS, Chattanooga:—

First, I use the atropia, and curette the ulcer and apply the cautery. I place the curette among the first and most important measures. I use the nitrate of silver and have had good results. I think hot water does great good. I never use the bandage unless there is danger of rupture of the cornea, but I use the hot water very freely. The ointment of mercury the essayist referred to is stronger than the one I use. I hardly ever use over a grain to the dram, and in children I use half a grain to the dram. This has been better in

my hands than the use of the stronger ointment. I have never used the iodoform much. I apply the silver by placing a very minute piece of cotton on a very small probe, saturating the cotton with the nitrate of silver and then squeezing out as much as possible, and apply after curetting.

DR. FRANK TRESTER SMITH, Chattanooga:—

In regard to the use of the yellow oxide ointment, I am like Dr. Trevis; I do not use it so strong as does the author of the paper. Sometimes I find, even where the ointment is made weaker, it irritates more than I want it to. I believe one cause of this is the fact that the yellow oxide is not thoroughly triturated. A good way to accomplish the trituration is to have it mixed first with a little bland oil, as sweet oil, before it is mixed with the vaseline. Another method that has given good results in my hands has been the use of the solution of bichloride of mercury, sometimes as weak as 1-20,000 to 1-10,000. The ulcer is washed with this and then dusted with boracic acid. The use of atropin is the rule in corneal ulcerations, but when we get an ulcer that does not yield to atropin and heat and the other things that have been mentioned, we sometimes find when we change to eserine the conditions will become better.

DR. G. C. SAVAGE, Nashville:—

There are just two or three points in connection with this paper I want to emphasize. One is the application of heat and the method of applying it. I use either the poultice made of flaxseed meal, or the Japanese hot-box. The Japanese hot-box may not be familiar to you all, but it certainly is one of the best means for the application of dry heat; the poultice is the best for the application of moist heat. The poultice in diseases of the cornea and in deeper diseases of the eye is capable of doing only good if properly applied. The only contraindication for the poultice is the presence of a muco-purulent discharge from the conjunctiva. A poultice which would retain the pus would do harm.

The method of making and applying the poultice I conceive to be of prime importance. A plate should be first heated and then the meal poured into the plate and stirred, with hot water, until it is thick enough to stick if you were to throw it against the wall. Then throw the ends of the cloth over it, when it is placed in the middle of the cloth, and apply to the eye, and bind it over the eye and allow to remain an hour and a half or two hours, covered with oiled silk. Then let the patient go as long without the application of another poultice as he wore the poultice just removed. The indication for the application of the poultice is the return of pain. I do not believe dry heat has one particle of advantage over moist heat, but I believe moist heat has rather an advantage over dry heat. But if I am not permitted to use the moist heat, I use dry heat in the shape of the Japanese hot-box.

In the treatment of corneal ulcerations, I do

not believe we have anything better than the discs of iodoform. I heard a paper read on this subject, and we all felt rather incredulous when the author said he could treat such cases and cure them in a few days. None of us were ready to believe him; at least, if he had not told us the truth before, we would not have known he was telling us the truth then. Of course, I would use the salve or powder in preference to the disc, in cases of muco-purulent discharge. The discs should be large enough to cover the part of the cornea affected. They at first cause considerable irritation. The proper method to keep the discs soft is the use of glycerin when making them. Muhl's method was to cleanse the eye with a solution, preferably bichloride of mercury 1-10,000, and then apply the disc and use over this a compress and bandage. It is then left alone for three days, when it is usually found healed. I had more curiosity than would allow me to go three days without looking at the eye. After returning from Edinburgh I tried the discs, but even with my modified method of using the disc I was very well pleased. I have not been willing to let the patient go three days, although I think it would be better were I to do so.

Now I want to speak of a new remedy; that is the use of the permanganate of potassium in about two per cent. solution. I believe this remedy is capable of doing great good, especially in ulcers attendant upon conjunctival troubles.

DR. T. H. WOOD, Nashville:—

I am very grateful, gentlemen, for the discussion this short paper has brought out. I used to have considerable trouble in treating corneal ulcers; but recently I have gotten along with them more satisfactorily. I believe a great many of the profession have the idea that an ulcer of the cornea is different from an ulceration anywhere else, that there is something in the essence of it that makes it different from an ulcer on the shin or any other part of the body. The sooner one gets rid of that idea, the sooner will he treat successfully ulcers of the cornea. I believe we will be successful when we remember the ulcer of the cornea is essentially just like an ulcer on the shin or any other part of the body. An ulcer is to be treated practically about the same way in one locality as in another, and the fact that it is on the cornea does not necessitate some line of treatment totally different from the treatment which would be necessary if it were located on any other part of the body. I believe curetting, cauterization and the use of iodoform is the best treatment, for the most of them at any rate. The cautery used may be the actual cautery, the carbolic acid, nitrate of silver or the permanganate of potassium. All these remedies are practically the same in effect; they are all antiseptics and they do good for that reason. Anything that will destroy the germs, I have no doubt, will accomplish the same end. Just as soon as we treat corneal ulcers as we would ulcers on the shin, just so soon will we cure them.

CURRENT LITERATURE CONDENSED.

The Vaso-Motor System, and the Treatment of Circulatory Disorders.¹

The importance of the condition of the vaso-motor system in disease is not appreciated. In view of our knowledge of its functions, we may assert that its integrity is as necessary to life as is the integrity of the heart. A heart may be lamed and the man live comfortably, whereas an ill-conditioned vaso-motor system will at once cause distress. The tonicity of the arterioles and capillaries offers a resistance to the action of the heart as natural as is the atmospheric pressure, and any variation of this resistance is followed by symptoms as definite as when we expose ourselves to rarefied air or to compressed air. A rapid pulse may be due to vaso-motor relaxation, and the proper treatment would then be to increase the resistance, not to give digitalis. Conversely, if a heart is laboring against a high arterial pressure, it is not wise to stimulate it to increased effort, but to lessen the resistance, as by nitrites or by bleeding. Much of the reputation of nitro-glycerine as a cardiac stimulant rests on this fact. In several conditions the heart is intact and the vaso-motor system at fault, and yet the heart gets the credit for the trouble. Most prominent among these is shock. After the primary inhibition of the heart by an irritated vagus, the entire group of symptoms indicates vaso-motor relaxation, shown by the soft, radial pulse, the cold, wet, leaky skin, and the bloodless surface. Under these circumstances the heart beats fast and abortively to fill the yawning blood-paths which have many times the area which it is capable of filling, and soon falls from exhaustion. In certain types of functional albuminuria there is relaxation of the renal vessels, so that they become engorged with blood and "leak albumin." Sometimes this is due to heart failure, but often to vascular atony. On the other hand is the man who, by reason of renal disease, or asthma, or both, develops an hypertrophied overactive heart, with slow pulse

and heaving impulse, the result of the greatly increased arterial pressure against which the heart is laboring. Dropsical exudation takes place from the capillaries, and the integrity of the walls of the blood-vessels and lymphatics depends on normal nutrition, or a proper blood supply. As a result, dropsy may be as much due to relaxed or poorly-nourished vessels as to any other cause. Either a weak heart or a relaxed artery tends to cause stagnation of the blood in the capillaries, and as such stagnation is productive of exudation, it is not hard to discover why low arterial pressure is a cause of dropsy. A high pressure in the *veins* is productive of the same changes. Dropsy may be due to a weak heart, unable to supply the arteries with enough blood to maintain the normal pressure, or to a damming up of blood in the venous system as a result of the imperfect emptying of the cardiac cavities.

If the kidney is diseased it may not be able to eliminate the proper quantity of liquids which accumulate and finally escape into the tissues, while the same failure in renal functions causes disease of the blood-paths themselves, and often produces cardiac complications. Hepatic troubles cause dropsy by producing pressure on the large blood-vessels going to the liver, and in consequence, the exudation is generally confined to the lower limbs and abdomen. Belladonna is our standby and mainstay in vaso-motor relaxation. I am as confident that I have saved life by its use in the collapse of acute disease as that I am here to-night. Muscles have the property of holding and requiring large amounts of blood. Sudden or prolonged exertion makes us "out of breath," and causes more or less cardiac disturbance, because in the early period of muscular contraction the resistance to the flow of blood through the muscles is enormously increased. Very soon, by vaso-motor equilibrium, we develop what is known as second wind. The muscle, at first anæmic by squeezing blood out of itself, soon requires an excess of blood to nourish it under prolonged strain, and its

¹ H. A. Hare, M. D., *Therapeutic Gazette*, March 16, 1896.

blood-vessels dilate widely and become congested, and the heart pumps blood without difficulty. The man with marked cardiac asthenia and dilatation falls dead when the resistance in his vaso-motor system, due to the exercise, results in paralytic distension of his ventricular walls. The man with cardiac hypertrophy and aortic regurgitation falls dead when exertion causes a pressure and consequent regurgitation incompatible with life.

A Case of Purpura Hæmorrhagica (Acute Exudative Erythema.),

A man twenty-four years of age, apparently strong and well developed, has served as a trooper for six years, and during this period suffered from no sickness. No history of syphilis could be obtained; no family history of hæmophilia; and the patient's mode of living has been exceptionally good. His bowels have been irregular, and he has been in the habit of using pills and epsom salts. One morning, after duty in morning riding-school, he found his right ankle very painful, and this grew worse so rapidly that he had to report himself sick. The ankle was found red, tender and swollen, with some ill-defined straw-colored spots on it. The anæmic appearance of the patient attracted attention and his tongue was thickly furred. The temperature was 100.8°. The patient was put to bed, cotton wool and a flannel bandage applied to the ankle, and then warm water fomentations with laudanum applied. Internally a mixture containing sulphate of soda, sulphate of magnesia, sulphate of quinine and dilute sulphuric acid was given. The shoulders, ankles, knees and elbows became affected, the swelling subsiding in one place to appear in another; then the eyelids became the seat of hemorrhage in the cellular tissue; then the lower limbs presented similar patches; then the prepuce. No pleuritic nor cardiac lesion could be detected and no lung affection. A blood examination was not made. Pain in the throat was complained of, the neck and cheeks became swollen, and later, the tongue, and it appeared as though tracheotomy

would be necessary. Improvement occurred however. The skin of the prepuce sloughed off, the anterior two-thirds of the tongue did the same; but the patient finally recovered. It is not merely on account of its great severity that this case is of importance, but the occurrence of such severe mutilation makes it still more so. The course of the disease and the low temperature were not those of rheumatism. The physical signs were carefully watched, and no evidence of cardiac involvement found. The case is reported in the hope of aiding in the elucidation of a mysterious disease.

Civic Heroism.

Dr. Ernest Helby, resident medical officer at the Croydon Fever Hospital, has lately saved a child's life by sucking the diphtheritic membrane from its throat after tracheotomy; he caught the disease, suffered some paralysis, and was for a time in danger of death. We are happy to say that he has now, under the antitoxin treatment, made good progress towards recovery. It is difficult to say the right thing when one hears another instance of this act of devotion; proverbs and texts fight in one's mind against each other, and it is hard to venture to blame him at all, and hard to praise him without reserve; but of one thing we are sure, that he deserves and has won the respect and admiration due to a man who is ready to lay down his life for a child. There is a story somewhere in history of a man who saved his country by methods of his own, which did not meet with the approval of the Government, and we may say at once that it was not the Transvaal. The Government crowned him, honored him, and gave him a triumphal procession, and then executed him for breaking the law of the land. We would mix a little reproach with a great deal of praise for Dr. Helby, and tell him that other lives as well as the child's life are bound up with his own, and we hope he tried suction with a syringe before he put his lips to the tube, and did all that was possible to avoid the danger of infection. But it is pleasant to stop our criticism at this point, and to assure him of our most sincere admiration of his absolute devotion of himself to save the life of a child.

* J. Fayer, M.A., M.D., F.R.C.S.E., *The British Journal of Dermatology*, March, 1896.

TRANSLATIONS.

MEDICAL PRACTICE ABROAD.*

(Formerly Therapeutic Suggestions from Foreign Journals.)

Treatment of Cholera.

Dr. Zoussailoff, (*Transactions of the Med. Soc. of Exaterinoslow*, 1896). The patients that the author had to treat all were seriously affected and in the algid stage. His procedure consists in applying cold to the spine. The mortality by the usual treatment was eighty per hundred, while the author reduced it to twenty-eight per hundred. The technique is as follows:—One bag of impermeable tissue filled with ice is applied to the spine, and another one to the cervico-occipital region. Both are firmly attached to the body with numerous ribbons. At the same time the entire body is covered with thick quilts. During the algid stage the patients easily support the ice, but so soon as this stage is over, they ask to be freed from it. However, if the ice is taken off too early, an aggravation is observed. When the application of ice is maintained, it is stated that in twenty-four hours the patient is warmed from the center to the periphery, the pulse is ameliorated, etc. The author believes that the ice influences favorably the central system which is greatly affected in cholera.

Treatment of Varicose Ulcer.

Dr. Bekarovitch's treatment (*Russian Jour. of Military Med.*, 1896), compared to the usual treatment of varicose ulcer, is advantageous in that it is not expensive, and is not long-continued, so that its convenience for the poor is evident. Having shaved and cleaned the affected part, the ulcer is washed with any antiseptic solution, dried with cotton, and covered with gauze coated with boric vaselin (10:100). Then he massages the extremity of the affected member, superficially at the beginning and deeply in five to ten minutes when the tenderness of the tissues has disappeared. Af-

ter the massage he washes and cleans the leg, covers the ulcer with powdered iodoform or iodol, and makes a dressing for two or three days with:

Oxide of Zinc . . . }	āā 10 grm. (3ijss).
Gelatine }	
Glycerine }	āā 40 grm. (3x).
Aq. Destill. . . . }	

One bandage is applied over the ulcer, and another, covering the first, from the toes to the popliteal space. In grave cases the author ligated the dilated veins, incised the tissues around the ulcer to diminish tension, curetted or cauterized the granulations which proliferated, cut out the edges of the ulcer if they were indurated, and, after all, sutured. The massage diminished the oedema, regulated the circulation; skin, muscles and vessels recovered their normal elasticity; the edges of the ulcer became soft; the tension of the tissues disappeared; and the nutrition of the whole member improved. Dr. Bekarovitch allowed his patients to walk and to work, and could state that the walking had no bad influence at all. [The author applied this treatment only to ulcers which had existed not more than one year and where, consequently, there was not yet fibrous alterations; where the dimensions of the ulcer were not enormous, and where the veins were not dilated to a great extent.—Ed.]

Of seventy-two cases, sixty-eight were completely cured and four greatly improved.

Treatment of Obesity and Ichthyosis with Thyroid Gland.

In ten cases of obesity and in one case of chronic ichthyosis, Jevzykovski, (*Med. Mod.*, March 18, 1896), succeeded with thyroid cure. He employed dry thyroïdine, sixty centigrammes (gr. x) of which represents one calf-thyroid gland. The dose was of .03 to .05 grm. (gr. vi to ix). He never encountered the sec-

*Translated for THE MEDICAL AND SURGICAL REPORTER by A. Gordon, M.D.

ondary symptoms, more or less serious, which have been observed by other authors. In one case of an enormous fatty heart with feeble heart-sounds and irregular pulse, the administration of 300 tablets of thyroïdine (each of which represents .03 grm. (gr. v) of the gland) gave a loss of 12 kil. 500 grm.; later dilatation of the right ventricle and weakening of the heart took place, but these troubles disappeared in fifteen days. The loss in weight was always remarkable: for example, one patient lost twenty kilos. in two months; another fifteen kilos. in three months. In addition to this treatment Dr. Jevzykovski recommended abstinence from excesses in food. As to the patient with ichthyosis, the eruption disappeared after five weeks' treatment with thyroïdine, but reappeared as soon as the treatment had been suspended. Treatment with higher dose was recommended and after two months the result was more satisfactory. No return has been observed.

Treatment of Blennorrhagic Orchitis with Guaiacol.

Dr. Tavitain, (*Médec. Mod.*, March 18th, 1896), vaunts guaiacol for orchitis. The application is made with pure guaiacol (2-3 grm. [gr. xxx-xxxv] each time), or with the following pomade:

Vaseline 30 parts.
Guaiacol 5 parts.

In benign cases three to four applications were sufficient to make the pain disappear and to diminish the swelling. In grave cases the patient has to be treated more frequently.

Chlorosalol in Surgery.

Chlorosalol has more remarkable antiseptic qualities than salol. In the organism it is decomposed in salicylic acid and chlorophenol, which are eliminated by the urinary system. Prof. Girard, (*Revue Méd. de la Suisse Romande*, Berne), states that where salol was indicated, he obtained much better results with chlorosalol. In catarrhal inflammations of the bladder chlorosalol is especially indicated. Its better effect compared to salol, is remarked by the patients themselves. In some febrile cases depending upon injuries of infectious origin, a daily

dose of 2-4 grm. (gr. xxx-lx) gave good results. Purulent wounds covered with chlorosalol were cured. In aseptic, recent wounds, one cannot assert that chlorosalol is preferable to iodoform, but it does not produce the irritation observed with salol. There are two isomeres of chlorosalol: ortho- and para-chlorosalol. Internally it is preferable to use parachlorosalol. Orthochlorosalol is not palatable.

Treatment of Anæmia with Artificial Serum.

Dr. Peillon (*Lyon Méd.*) obtained a remarkable result with hypodermic injections of artificial serum in two cases. The dose was from five to ten c.c.m.

The formula of this serum is:

Natrii Chlor.	5	(gr. lxxx).
Natrii Phosph.	10	(℥ijss).
Natrii Sulp.	2	5 (gr. xxxviii).
Acid Carbol.	0	5 (gr. viii).
Diluted in Aq. dist.	100	0 (℥ijss).

Treatment of Anæmia with Zinc.

Dr. Savoca (*Archivio di Farmacologia e Ther.*, May, 1895) thinks that in order to increase the quantity of hæmoglobin in the blood, iron is not sufficient, but must be combined with some other metals. His experience determines him in favor of zinc. The daily dose is 1-6 cm. zinci sulf. No other remedy is employed during the treatment with zinc. Not only was hæmoglobin increased in quality and in quantity, but the weight and general health of the patients showed improvement.

Sublimatum and Chininum Bichlorat. in Grave Anæmia.

In three cases which could not be cured with usual treatment, subcutaneous injections of sublimate gave remarkable results. In one case Dr. Gennaro de Francesco (*Gazz. d. Osped.*, Jan. 5, 1896) injected every day one m.grm. (gr. ʒʒʒ) of sublimate between the scapulæ. One month of treatment greatly improved the patients. In one case the author observed the beginning of convulsions and fever. He ordered, immediately, kalii bromati *per os*, and substituted one-half grm. (gr. viij) chinini bichlor. for the sublimate. Later the patient had, one day, .005 grm. (gr. ʒʒʒ) sublimate, and

the next day .50 grm. (gr. viij) chinini bichlorate, by hypodermic injection. In addition to this, .5 grm. (gr. viij) kalii bromatis in water *per os*. Having obtained a good result after a treatment of forty days, Dr. Francesco decreased, little by little, the dose.

Therapeutic Value of Nitrate of Silver in Different Forms of Anæmia.

Dr. Vestri Raniero stated (*Arch. Ital. di Clin. Med.* XXXIII.) that by the use of nitrate of silver the appetite was greatly improved, the digestion became easy, and general strength increased. Not only is the number of the blood corpuscles increased, but hæmoglobine also increased in quantity. The blood itself became more alkaline.

The Influence of Hydrotherapy and Massage on the Revival of Syphilitic Symptoms During the Latent Period.

Dr. Edmond Güntz, Dresden, (*Aerzt. Centralanzeiger*,) observed a great number of cases, which justified the conclusion that general or local irritations are liable to rekindle latent symptoms of syphilis. Hydrotherapy is considered as general, and massage as local irritation.

Iode and Iron for Grave Anæmia.

Dr. Menella-Rom. (*Wiener Med. Presse*, 2, '96) gives the following formula:

R Iodi pur.	0	20 (gr. ijss.)
Kalii iod. q. s. ad solution in Aq. destill.	20	0 (3 vss.)
Sig. For hypodermic injection.		
R Ferri Ammon. Citrat.	1	0 (gr. xv.)
Aq. dest.	20	0 (3 vss.)
Sig. For hypodermic injection.		

A Pravatz syringe-full of the first solution is injected into one breech, and the same amount of the second solution into the other breech. The injection must be done every day, or even twice a day.

Treatment of Neurasthenia and Hysteria.

Dr. Donadien (*Arch. gen. d'hydol., Clim.*, March, 1896) formulates the principal treatment as follows: Muscular exercises, or absolute rest. It is a question of professional tact to know in which case one must employ the one or

the other treatment. In fact, the facies of the patient can give the indications. In case of a fat type, with nutrition intact, powerful muscular system, one will note psychical stigmata. The brain had too much exercise and was not compensated by physical exercises. Here prescribe rest for the brain, exercises, country life and hydrotherapy. When, on the contrary, one is in presence of a meagre type, with a cachectic facies, deprived of fat and blood, with moral depression, tired physically, unable to work with the brain,—the treatment is entirely different. Absolute physical and mental rest during a certain number of months; hydrotherapy, as Charcot's douches, cold douches (15–20 seconds), douches with feeble pressure, warm douches. Baths of 32° to 35° C.

Iron, Silver, Lead and Mercury in Otology.

Dr. Wolf (*Rev. Hébd. de Laryng.*, 1896): Iron is convenient in cases of anæmia and chlorosis, complicated with nervous trouble in the ear-apparatus.

Eczema of the external ear and the meatus can be treated locally with acetate of lead.

Nitrate of silver does not diminish the secretions of the ear. In case of suppuration, the author recommends instillations and irrigations of the middle ear with sublimate (one per cent.) When the patient is very nervous, he recommends instillations of cocaine (fifty per cent.) before using the sublimate.

Stimmel thinks that cyanate of mercury is preferable in any kind of suppuration, and its action is more certain if alternated with resorcine (two per cent.)

Reinhard proposes acetate aluminii for external otitis. In case of syphilis, mercurial frictions combined with injections of pilocarpine are very useful.

Dennert advises an internal treatment of ferrum and tonics in case of chronic and rebellious suppuration.

PRYER—What medical college is your physician a graduate from?

GUYER—Medical college! Huh! He's no medical college fledgeling. He's a graduate of the jury which listened to the expert testimony in a great poison case.—Puck.

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PHILADELPHIA, SATURDAY, APRIL 25, 1896.

EDITORIAL.

THE PHYSICIAN, THE LAITY AND THE DIAGNOSIS.

One of the most difficult tasks of the physician, and one by no means so unimportant as it has sometimes been considered, is the naming of disease. The popular idea is that there exists a large but definite number of maladies, each of which is well marked and distinct from the others, and that, with some slight allowances for individual peculiarities, the treatment of a disease is the same in all cases. A certain comedy includes a scene in a physician's office, with the office-boy putting up prescriptions. A cupboard has pigeon-holes numbered to correspond to different diseases, and the boy takes from one and then another compartment, the

medicine according to the name and number of the disease. When he comes to a case of disease No. 15, he finds the bottle empty. He is puzzled for a moment, and then, remembering that seven and eight make fifteen, he mixes the corresponding medicines and fills his prescription. The audience laugh at the fallacy, but few comprehend that the result of such addition would be no more disastrous than any other pigeon-hole method of prescribing.

"What is the trouble?" is, naturally, the first question asked after the physician's examination is completed. So long as he can answer "Measles", or "Quinsy", or "Pneumonia", the lay

mind is satisfied. If, as happens in fully a third of all cases occurring in general practice, and in the great majority of cases which consult a specialist, no single term is appropriate, the patient and his friends feel a certain sense of disappointment, if not actually of dissatisfaction. Disease to them is an entity, not a process nor a combination of processes.

In the vain attempt to give a name to each condition, strange inaccuracies and inconsistencies have been perpetrated. Some physicians conscientiously attempt to explain the nature of a case when asked for their diagnosis. This is a good plan with intelligent people, but it often produces the most unexpected and amusing, if not embarrassing, misconceptions.

Others, arguing that one name is as good as another to a person not acquainted with medical science, call a disease by whatever term seems most convenient. This practice has its defects also, particularly when the attendant forgets from one visit to the next, the name he has employed, or when a consultant or successor uses an entirely different term. One of our patients demanded a name for the gastric troubles depending on Bright's disease, and, after the diagnosis was stated, she said: "Well, Doctor, Dr. ——— told me my kidneys were paralyzed." At first thought, the statement seemed ridiculous, but a little consideration showed that the description was an apt one, making allowance for the patient's incapacity to understand technical details.

A curious nomenclature has arisen from the disposition of the laity to regard diseases as entities. The lay mind has little curiosity as to the real nature of a disease. Simply the name is wanted, as of a disagreeable person with whom one must associate, but about whose

inner life one cares nothing. "Doctor, is not that child liver-grown?", asks some anxious grandmother of the obstetrician. If the latter replies, as he is tempted to do when first he hears the expression, "What on earth do you mean by *liver-grown*?", he will find that he has established his own ignorance without eliciting any information. If, puffed up with medical knowledge, he boldly asserts that no such condition exists, he may convince the inexperienced primipara, but not the wise women who wait upon her, nor the mother of a numerous family. When he has learned that "brain fever" is meningitis, that "inflammation of the bowels" means inflammation of the peritoneum, that "anteflexion of the uterus" is not recognized as a normal condition, nor "pneumonia of the lungs" as a tautology, that the word "tumor" should never be used unless one wishes to alarm a patient with visions of cancer, that "abscesses" and "ulcers" are loathsome and disgraceful conditions, that "dyspepsia" and "palpitation of the heart" are satisfactory diagnoses beyond which he need inquire only for his own gratification, then the physician is able to deal tactfully with popular prejudices.

It may be observed that one physician following another, almost always has the opportunity to cast slurs upon his predecessor's diagnosis. The lesson should be learned early that it is neither ethical nor, in the long run, profitable to sling mud at a fellow practitioner. A little skill in parrying questions may enable one to concur courteously with a diagnosis which he would otherwise appear to contradict, and to aid in dispelling the belief that doctors inevitably disagree, and that the modification of terms to harmonize with another's diagnosis, is a mere attempt to shield an error.

In some instances, the language used in describing a disease becomes of unusual importance, and honesty of purpose may be judged from the phraseology employed. "You are threatened with a fever", is a correct statement if addressed to a healthy man who drinks polluted water, or who works in a swamp. It is a contemptible exhibition of cowardice if made at the bedside of a patient who already has a fever, the nature of which is not apparent. "You have a touch of typhoid, but I shall try to break it up", is another misleading expression, too often employed by men who do not intend to be dishonest. Barring the men who really believe they can diagnose typhoid, diphtheria, and other diseases, from the first vague initial symptoms, and who have faith in the power of quinine and revulsives to abort the disease, the idea of breaking up a fever is a popular prejudice fostered for the pecuniary benefit of the medical profession. Why not say candidly, "The patient is feverish and we must be on the lookout for typhoid. It is too early to make a positive diagnosis and, meanwhile, treatment must be carried out just as if the diagnosis were certain."

In the case of directly contagious diseases, a tendency exists which cannot be too strongly condemned, to make use of diminutive terms which shall serve to lull the fears of the parents, but which, unfortunately, relax necessary vigilance, at the same time. There is a very prevalent belief, for which our profession must ultimately be responsible, that scarlatina is a mild and benign form of scarlet fever. The term "rose-rash" has also been used with a dangerous vagueness. Or the little patient is said to have a "touch of diphtheria", or a "diphtheritic sore throat", or a "diphtheroid attack." Such hedging is highly reprehensible. There either is or is not

a contagious disease in progress. One case may be milder than another, but all grades are equally infectious and equally dangerous to the circle in which the patient lives. If the diagnosis is doubtful, this fact should be frankly stated, and the benefit of the doubt should be given, not by relaxing precautions and avoiding inconvenience, but by adopting every known prophylactic measure. Honesty may be a losing policy in individual instances, but it is not in the long run, and men in our profession who play on the hopes and fears of the laity are fast being exposed by the rapid dissemination of knowledge as to what the intelligent physician can and what he cannot do.

As an antithesis of the practice just referred to, might be mentioned the equally dishonest custom of exaggerating the importance of a disease and of levying blackmail in accordance with the fears of the patient.

We believe that if the medical profession were united in using plain names for disease, in teaching the community that the majority of cases cannot be brought within any arbitrary schedule, and in acknowledging the inevitable limitations of human skill, that mutual confidence would gradually be developed. At present, we are still hampered with the mysticism and affected dignity of past generations, but the straightforward, earnest student of disease, whose stock in trade is brains and education, not mannerisms and bluff, is making his influence widely felt.

Theodore Hook was a great wit, and very ready. He was asked to write something about the death of the King and Queen of the Sandwich Islands. His production read as follows:

"'Waiter, two sandwiches,' cried Death,
And their wild majesties resigned their breath."

THE SEMI-CENTENNIAL OF THE AMERICAN MEDICAL ASSOCIATION.

In May, 1846, a convention of delegates from the medical schools and societies, met in New York City at the Medical Department of the New York University, with Dr. Jonathan Knight, Professor of Surgery in Yale College, as its presiding officer.

This convention appointed committees to report the following year, on the organization of a national medical association; on a uniform and elevated standard of requirements for the medical degree; on preliminary education of medical students; and on a code of medical ethics. After charging another committee with the duty of inviting the medical colleges and societies to send delegates to a convention in Philadelphia in 1847, the body adjourned.

On the 5th of May, 1847, delegates appointed by the various societies and medical schools of the several states, assembled in the halls of the Academy of Natural Sciences of Philadelphia, and resolved themselves into the American Medical Association.

These two conventions were the results of a movement begun in 1845, by Dr. N. S. Davis in the New York State Medical Society, for the purpose of elevating the standard of medical education by obtaining concert of action on the part of the various medical colleges and societies.

The Association thus founded in Philadelphia has done good work in elevating the tone of the medical profession and raising the standard of professional education. It has served to bring physicians together in scientific and social intercourse, and has by its publications made known in every part of the land truths which have made the work of the doctor easier and the happiness and comfort of the public greater.

The Philadelphia County Medical Society has done well to invite the national organization to meet in the city of its birth, in 1897. The *REPORTER* is sure that the local profession will make the fiftieth annual session of the American Medical Association worthy of the distinguished physicians who inaugurated the movement to organize the profession of the United States.

If the invitation from Philadelphia is accepted, preparations ought to be commenced at once to make the semi-centennial of the Association representative and full of scientific interest.

Few of the original members survive, but the words and deeds of those wise guardians of professional honor will ever be remembered by their successors in the fraternity of medicine. Nowhere in the Union, is the labor of these men more appreciated than in Philadelphia.

We publish in another column, the Resolutions of the Philadelphia County Medical Society.

"Denver has one among its pretty girls who was in the country last summer, and one day she happened out toward the cow-lot about milking time, and was asking the man several questions.

" 'Why don't you milk that cow?' she asked, pointing to one in an adjoining lot.

" 'Because she's dry, miss.'

" 'Dry?'

" 'Yes, miss; she's been dry for two weeks.'

" 'You cruel wretch,' she exclaimed. 'Why don't you give her some water?' And the man turned his face to the cow-house and shook with emotions he could not suppress."

The palate is the janitor, and unless he be conciliated, the most nutritious food will find no welcome.

ABSTRACTS.

THE SEQUELS OF INFLUENZA.

Sir Dyce Duckworth (*The Lancet*) says:—

The sequels of influenza have only been studied with care in the course of the epidemics which have prevailed in the last seven years. They escaped the attention of the older observers. They are very numerous. It may be fairly affirmed that many of the gravest characters of the malady occur after the acute stage has passed away and when convalescence is apparently assured. I think there has possibly been exaggeration in respect of some of the alleged sequels of influenza; still they are, as I have said, numerous. The general asthenic type of the disease is well recognized. The enfeebled mental and bodily states left behind it have been forcibly and sadly brought home to most of us of late, both in our own persons and in our patients and friends. Recognizing the fact that each epidemic is signalized by a dominant form for the most part, we may discuss the particular sequels attending, first, the thoracic, secondly, the gastro-intestinal, and, thirdly, the nervous varieties of influenza. The personal factor comes in here strongly in respect of each individual affected, and, as has been said, "each patient convalesces according to his temperament," and, no less, I would say, his diathesis. Nearly sixty years ago Sir Henry Holland noted the long persisting influence of this disease upon the constitution as a remarkable feature; also the variation of parts affected in different individuals or at different periods in its progress. In respect of sequels ensuing on the thoracic forms we may note the prolonged course of the peculiar broncho-pneumonia, so often fatal to the weakly and the aged in its earlier stage. Next, the onset of tuberculosis. Abscess of the lung has been several times met with supervening on pneumonia, and Pfeiffer's bacillus has been found in the yellowish brown sputa expectorated from it, together with elastic fibres from the lung.

Hitzig¹ records a case in which careful examination proved the matter from the abscess to be free from streptococci, staphylococci, and from tubercle bacilli, and to contain only influenzal bacilli. Pleurisy is common and empyema may result. The heart is often severely affected. Great weakness of the organ is common; arrhythmia, bradycardia, tachycardia, and pseudo-anginal attacks with dilatation, may occur long after the illness. Pericarditis and endocarditis are but rarely met with. Vertigo is a very frequent symptom, a tendency to it persisting for months after an attack. The gastro-intestinal variety of influenza may lead subsequently to vomiting, simple catarrhal jaundice, chronic gastro-intestinal catarrh, diarrhoea, or constipation, with marked nervous depression. The nervous variety is apt to lead up to many subsequent troubles. A rapid denutrition of nerve centres is more or less common in all cases presenting any severity in the early stages. Neurasthenia may prevail for one or two years subsequently. Polyneuritis is a common sequel. The arms may be paralyzed, with both motory and sensory disturbance, and wrist-drop may occur; moreover, the same process may occur over large areas. Neuritis may involve cranial and other nerves locally. Encephalitis, myelitis, sclerosis of various tracts of the spinal cord, neuralgia, especially the intercostal variety, conjunctivitis, iritis, otitis media, mastoid abscess, malignant endocarditis, parotitis, orchitis, and lymphadenoma, with many other affections, have been noted amongst sequels in various recent epidemics in all parts of the world. Somnolence, or extraordinary drowsiness, with hebetude, is a noteworthy feature. Headache, vomiting, and various mental disorders may occur. Melancholia leading to suicide is by no means uncommon. Mental incapacity long re-

¹ *Munchener Medicinische Wochenschrift*, August 27, 1895.

mains, and many patients affected in middle life tell of inability for efforts, mental and bodily, that were easy to them previously. They feel many years older in all respects.' The natural level of health may never be regained, or not fully re-established, for two or three years after a severe attack. Abscess of the brain has been several times noted as a sequel, also simple lepto-meningitis. Dr. Harry Campbell has recorded a case in which a young man, a victim of hemi-crania, lost this tendency after an attack of influenza. Mental affections may also sometimes subside after an attack. The sequels of this disease are doubtless often very varied and often extraordinary. A medical friend of mine has been unable to take coffee since he suffered from a severe attack in February, 1895, without feeling considerable cardiac discomfort, although there was no arrhythmia and the heart sounds remained normal. In his case, too, and in another there remained for months subsequently a liability to paroxysms of low temperature, with extreme chilliness and distressing sensations, observations made in the mouth, axillæ, and rectum recording a temperature of only 96° F. Such attacks continued to occur once in every eight or ten days and not unfrequently in the night. (Nothing afforded so much relief as an ounce of whiskey taken as hot toddy.)

Influenza, in common with other infectious diseases, distinctly appears to pre-dispose to the onset of other diseases. The lowered vitality induced by the primary malady leaves the patient a more ready prey to the attack of any other he may be exposed to. Sir William Broadbent has expressed the opinion that an attack of influenza may in this way determine the outbreak of enteric fever, the pyrexia of the former running on into the latter, so that the new malady may appear to be, as it were, a prolongation of influenzal fever. Or a distinct interval may elapse between the one disorder and the other. Translated into the language of to-day, we may substitute for the term "lowered vitality" a condition of the solids and fluids of the body in respect of their powers of

resistance to invasion by specific toxines which is unequal to the struggle between them and the infection. We have already noted instances of a like kind in the cases of measles, varicella, and pertussis. It is also conceived by Broadbent and others that germs of disease may lie latent in the body and remain inoperative till the resistance of the host is impaired by some circumstance, such as infectious or other illness, or traumatism, which forthwith liberates the latent germs with the consecutive onset of a fresh ailment. The occurrence so frequently of tuberculosis after injuries and infectious fevers may possibly be explained in this way, also the development of tertiary syphilitic disorders.

Relapses of influenza are commonly met with and may occur several times at fairly long intervals after the primary infection, and long after the original epidemic has passed away. We may doubt the occurrence of fresh infection from without, as by sporadic influence, in many such instances, and I think we may consider as probable a view of this matter for which I am indebted to our registrar, Dr. Edward Liveing. He conceives it to be not unlikely that the toxine of influenza may act very much as does that of malaria, leaving behind it residues of specific infective matter, which wake up into activity from time to time, and induce fresh outbursts of the disease in response to any conditions which temporarily lower the general vitality of the body. We may thus regard such relapses as evidence of sequels of the direct residual class. I have experience of cases in which four or five attacks have occurred within two or three years and at varying intervals. The conditions in respect of symptoms, type of pyrexia, and general character leave no doubt as to the true nature of the disorder, and intelligent patients, in three cases in the persons of well-known members of our profession, have recognized only too well the specific qualities of it.

Acute bronchocele has been several times observed to follow influenza. One lobe may become greatly enlarged and give rise to dyspnoea or orthopnoea, with a fluctuating tumor. Incisions give exit to viscid fluid with relief to the symp-

2 One of my patients, aged sixty-eight years, a former athlete at Cambridge, stated that he felt like a man of thirty-five till he had influenza; afterwards he felt like a man of seventy.

toms, but the discharge may continue to flow for months—thirteen months in a case recorded by Dr. Browne of Alderley Edge.³ In another case there remained enlargement of the gland for eighteen months, acute inflammation having begun three days after the influenzal temperature fell to normal. One of the most remarkable cases I have seen occurred in a man aged sixty-eight years, brought to me by Dr. Elliott of Chester, in whom great wasting had occurred in the pectoral muscles. This followed an attack of influenza nine months previously. Twenty-eight pounds weight had been lost during that time. The ribs were plainly visible. There was marked difficulty of inspiration and the upper portion of the chest hardly moved. There was no myoidema. The brachial muscles were soft but those of the lower limbs were firm. There was general weakness and early fatigue on walking. Improvement slowly followed treatment by massage, warm douching, and dosage with strychnine, phosphorus, and arsenic. This man was at one time apparently in peril from respiratory difficulties. There was evidently some focal myelitis in the cervical portion of the cord. My colleague, Dr. Lewis Jones, has given me particulars of a case in which wasting of the muscles of one buttock followed after an attack of influenza. Recovery ensued after treatment. Bladder troubles may set in and persist after an attack. Diabetes has been several times observed as a sequel.⁴ Arthritis and multiple synovitis sometimes follow influenza. At the outset of many cases it is sometimes difficult to be sure that rheumatic fever is not in progress. There may be pains in the joints and pyrexia. The two disorders may even occur together and lead to a very grave condition owing to carditis. Cases have been carefully observed in which symptoms of myelitis, involving several tracts in the cord as well as the cornua, have led to arthritis or true spinal arthropathy. Dr. Sansom has directed attention to such cases, and has carefully studied them.⁵ He has shown

that there may be both affection of the cord and of the peripheral nerves in such instances. In a case he relates at length there was polyarthritis and symptoms pointing to disease of the antero-lateral columns, muscular spasms, and contractions, motor paralysis and muscular wasting, also sensory changes, incoördination and delayed transmission of thermic and other impressions. No pyrexia was present. The subject was a woman of rheumatic proclivity, but Dr. Sansom found no ordinary symptoms of rheumatic fever. The illness began four months after a confinement and was clearly influenza, and many of the above symptoms were present on her admission to hospital. She left benefited, but returned in two months' time with arthritis of the left knee newly set up. This was six months after the attack of influenza. An almost perfect recovery from all the symptoms ensued, and this is an encouraging fact to note, since it relates to the prognosis of nearly all such grave conditions following influenza. My colleague, Mr. Howard Marsh, has recorded several examples of arthritis of this nature.⁶ He has found the hip-joint most often attacked. Synovitis first sets in, with stiffness and swelling. Muscular wasting soon follows. Severe sciatica occurred in one such case. There was fever, with a temperature of 102° F., in one case. The symptoms usually subside in two months' time. In one instance the disorder followed six months, and in another seven months, after attacks of influenza. The conditions appear to simulate tuberculous disease of the joints, but the prognosis is generally satisfactory. Mr. Jennings has recorded two cases in which influenza appeared to cause reopening of old wounds in the skulls of miners which led to abscesses and fatal results.⁷

Were I to enter at length in laying before you an account of the sequels of influenza as set forth in the special literature on the subject during the last five years the whole time allotted to me would not suffice for the purpose. For a minute account of these I would refer you to the second edition of Dr. Althaus's work on influenza.⁸ He records instances of

³ *Brit. Med. Jour.*, June 8th, 1895, and references to other cases May 2d, 1895.

⁴ Hennig: Beiträge zur Symptomatologie und Therapie der Nervösen Formen der Influenza. *Münchener Medizinische Wochenschrift*, Sept. 3d, 1895.

⁵ *Clinical Journal*, Jan. 9th, 1895, p. 165.

⁶ *Diseases of Joints*, second edition, 1895, p. 30.

⁷ *Brit. Med. Jour.*, June 8th, 1895.

⁸ *Influenza*, &c., London, 1892.

every variety of complications and sequels with an elaboration into which I cannot attempt to follow him. They amount to at least sixty in number, and this writer has calculated that varieties of sequels may be looked for in about twenty per cent. of all cases. After

perusal of this work one must not feel surprised to meet with almost every known malady as a sequel of influenza, and the prospect is, indeed, almost overwhelming. At this moment, however, I may perhaps venture to say, *Satis est, quod sufficit.*

EPILEPTIC MELANCHOLIA.

DR. J. M. FINKER, assistant superintendent of Rockwood Hospital, Kingston, Ontario, reports an interesting case of epileptic melancholia¹ in which after death foreign bodies were found in the heart and lung. The patient was a laborer's wife aged thirty-two. She had had several attacks of insanity for four years previous to her admission to the asylum. Her mother and grandmother were insane; the latter was also subject to epileptic seizures. The patient had made several attempts on her own life, one of these occasions opening two large veins in her arm with a piece of broken bottle and a pair of scissors. When she was under the suicidal impulse she used to say that "she would be better out of this world, that no one cared for her." At times she was fairly well and occupied herself in sewing or knitting. Whilst in the asylum her whole history was one of suicidal attempts, which were shown by the scars on her arms and forearms. Trephining was performed, a portion of the brain convolution being removed corresponding to the nervous supply of part of the local origin of convulsions. She made an excellent recovery from the operation. She was greatly relieved of her distressing mental symptoms, but pulmonary tuberculosis supervened and ran a rapid and fatal course. At the necropsy the heart was found to weigh nine ounces, and on examining the left auricle something sharp was felt near its appendix, which proved to be a needle. On exposing this it was found embedded in the wall of the left ventricle, close to the anterior interventricular groove. The needle pointed upwards, leaving the left ventricular wall just anterior to the aortic valve. Then it penetrated the wall of the left auricle at the

margin of the appendix auriculæ. The pointed portion of the needle then extended across the opening into the appendix. The point was just touching the opposite wall of the auricle, where a little papilla of vegetations was set up by the irritation of the point of the needle. In the ventricle the needle penetrated the heart muscle immediately behind the coronary artery on its way to the anterior interventricular groove. The needle was firmly embedded in the tissue, so that it could not be pulled out without using considerable force. It was one and five-eighths of an inch long. It was black in color and its surface quite smooth. The left pleura was firmly adherent throughout. The superior lobe of the left lung was a mass of tuberculous nodules and some small cavities. The inferior lobe presented another feature of interest in the presence of a broken knitting-needle. There was an old cicatrix in the skin to the left margin of the sternum. The needle, pointing downwards, entered the lung at the anterior border of the inferior lobe about two inches from the lower margin, passing downwards, backwards, and slightly outwards, reaching the outer surface of the lung at a point about four inches from its posterior border and two inches above the circumference of the base. The needle was four and five-eighths of an inch long, the broken end being slightly bent and the other end pointed and sharp. The needle was completely encysted. Neither point emerged before the manipulation of the lung in its removal. It was quite black and was not in any way corroded.—*The Lancet.*

Courage, cheerfulness and a desire to work depends mostly on good nutrition.
—Moleschott.

¹ Canadian Practitioner, February, 1896.

THE LATE GIUSEPPE FIORELLI.

Medicine owes a debt of gratitude to the distinguished archæologist above named, for he it was who not only enriched the treasure-trove of ancient surgical instruments but also preserved for the comparative anatomist a vast number of skeletons eighteen centuries old which otherwise would have been lost to history and science. These services he rendered in his capacity of superintendent of the excavations at Pompeii. For twelve years he was the life and soul of the operations by which that buried city has been restored to something like its former self in outline and in detail. Before 1860, the year in which the Bourbon Government was replaced in the Two Sicilies by that of the House of Savoy, excavation was conducted at Pompeii on unscientific lines, more attention being given to whatever objects of artistic or negotiable value could be unearthed than to the determination of the plan of the city, its buildings public and private, its occupations, its *vie intime*. Every visitor to the National Museum of Naples must have profited by the richly represented and beautifully arranged relics of Campanian life placed *en évidence* before him, and supplementing so fully and so vividly a walk through the silent streets and tenantless houses of the once animated "Rome-super-Mare"—the "gay and guilty Brighton of the first century." All that memorable experience was made possible for him between the years 1860 and 1872 by Fiorelli—an epoch in archæology which has been continued under the inspiration of its directing mind to the present day. During those twelve years some 600 skeletons and fragments of human bodies were excavated, all the individuals to whom these skeletons belonged having, with one exception, died in great agony. Suffocated by the dense showers of dust which descended from Vesuvius and which by the heavy rainfall that ensued became so much liquid mud, their bodies were covered by this last as by an envelope, which, on hardening, became "a closely fitting mould" stereotyping every feature of the dead. Gradually the soft parts disappeared while the

bones remained within the mould; and so "when the hollows were come upon by the excavators the happy idea occurred to Professor Fiorelli to pour in some liquid plaster-of-Paris and allow it to harden." The mud, perfectly dry, was with the utmost care peeled from the plaster and in this way a perfect cast was obtained—in the language of Mr. Neville Rolfe, H.B.M., Consul at Naples, "a cast consisting of the bones of the deceased Roman citizen, clad no longer in flesh, but in plaster-of-Paris, which had assumed the exact shape, not only of his face and body, but of every fold of his clothes." A precious addition has thus been made to the resources of what may be called "historical osteology," and interesting comparisons have been instituted between the bony framework of the Italian as he existed eighteen centuries ago and the Italian of the present generation. These "confronti" strengthen the conclusion come to by Professor Mosso of Turin, who, having found a number of skeletons in a sub-Alpine cave and proved them by accessory evidence to have been those of Roman soldiers of the late Republic, compared them with the skeletons of Italian soldiers recently dead, and placed it beyond doubt that the difference between the two types of men was small and not to the advantage of the more ancient. So that Julius Cæsar's famous Tenth Legion, that could go everywhere and do anything, owed its success as much to consummate discipline and generalship as to any exceptional advantages of physical development. Professor Fiorelli died on January 29th at Naples in his seventy-third year, but for the last decade of his life, with failing eyesight which latterly ended in total blindness, was content to rest on the laurels he had so honorably won.—*The Lancet*.

"The teacher of the infant class at the Sunday-school, to interest the little ones, had begun to tell the story of the fall of man, when a mite of a girl was heard to exclaim, half aloud:

"O, I'm so tired of that story about the Adamsses."

SOCIETY REPORTS.

SECTION ON OPHTHALMOLOGY, COLLEGE OF PHYSICIANS OF
PHILADELPHIA.

A stated meeting was held on the 21st of January, 1896, Dr. Wm. F. Norris, chairman, presiding. Present: Drs. Frieblis, Hansell, Harlan, Norris, Oliver, Randall, Ring, Risley, de Schweinitz, Thomson, Zentmayer and Zimmerman, Fellows of the College; with Drs. Adams, Brick, Bromley, Cassel, Chance, Krauss, Lamon, McGuigan, Posey, Shoemaker, Stevens, Sweet, Veasey, and Zeigler as guests.

Dr. George Frieblis presented a case of **Partial Rupture of the Eyeball Followed by Recovery, with Restoration of Vision to almost full Acuity**, occurring in a young man eighteen years old. The right eyeball sustained a large break through its corneo-scleral junction, extending beyond the equator, by the entrance of a piece of heated iron. The wound was sutured and vision gradually rose to almost normal. When seen five years later, vision still remained the same.

Dr. George E. de Schweinitz made a brief communication upon **Restoration of the Upper Lid Border by Hotz's Method**, and showed two cases upon whom he had recently performed the operation.

Dr. Howard F. Hansell showed a two-year-old child of Russian parentage who exhibited a well-marked clinical picture of **Retinal Glioma** in the left eye. It now could be readily perceived by ordinary inspection without the use of oblique illumination. Dr. Frieblis gave a short account of a similar case in which both retinæ were affected. In this instance there was a family history of an older child who was similarly affected and who soon died after enucleation had been refused the attending ophthalmic surgeon. Dr. William Thomson stated that it is a very interesting fact that the present case had not as yet presented any signs of increase of intra-ocular tension, thus rendering the diagnosis not absolutely certain.

Dr. George O. Harlan described a new operation intended for the preparation of an orbit for the insertion of an artificial eye. The procedure consisted in an attempt to form an artificial sulcus by the passage of a stout lead wire through the base of a number of cicatricial bands and adhesions which connected the lids with the bottom of the cavity. The wire was passed around the bottom of the cavity, its ends were twisted together at the external canthus, and it was to be allowed to remain in place until the tissue lining the passage that it formed had completely cicatrized. It was then to be removed by incising the cicatricial tissue in front of it,

and an artificial eye was to be inserted, the margins of which should rest in the position that the wire had occupied. The patient was shown several weeks after the insertion of the wire, which had occasioned scarcely any irritation, and the final result will be reported at some future meeting.

Dr. Charles A. Oliver exhibited a patient from whom five years previously he removed a piece of steel from the vitreous chamber by means of an electro-magnet. The operation, which consisted in passing a straight electrode, carrying a current of thirty-five cell strength through an incision made through the sclera between the insertion of the external rectus and the inferior rectus muscles, resulted in the extraction of a small piece of steel, which was followed by a rapid cessation of all inflammatory symptoms. The patient was lost sight of until about a month before the meeting of the Section. When shown at the meeting the eye was perfectly quiet.

Dr. S. Lewis Ziegler showed a case also in which a piece of steel in the vitreous was removed by an electro-magnet. The case presented almost identical symptoms as the one reported by Dr. Oliver; and although the same length of time had not elapsed since the operation the eye had also remained perfectly quiet and comfortable.

Dr. de Schweinitz gave the brief notes of a case of laceration of the left eyeball caused by a piece of steel which had been broken from a cold chisel. The eye was partially collapsed, and vision had sunken to the ability to see to count fingers. In spite of the fact that upon account of extravasated blood no foreign body could be detected, the patient was etherized and the flat point of a Hirschberg electro-magnet (the current being obtained from a three-celled cautery battery) was introduced three times within the eye and moved in all directions, but was withdrawn without securing the foreign body. Under careful treatment, the eyeball had assumed its proper shape and regained almost its normal tension in three days' time. In two weeks, vision had risen to $\frac{3}{4}$, and the only ophthalmoscopic lesion visible was a large triangular white patch on the temporal side, indicating the point of rupture. Six weeks later, vision had fallen to $\frac{1}{5}$, and the entire vitreous was filled with fine points of opacities.

Dr. Hansell cited the instance of a case that he had seen about one month previously. Eleven days before being seen, the patient, a blacksmith, had been struck in the outer and

lower scleral quadrant with a piece of steel. The point of an electro-magnet was carried into the eye through the wound of entrance of the foreign body, but nothing could be found. Panophthalmitis soon set in, the eye was removed, and a piece of steel was found imbedded in a mass of pus situated down and in from the crystalline lens.

Dr. de Schweinitz described three cases of macular hemorrhage, and presented water-color sketches of the same made by Miss Margaretta Washington, of this city. The first was one of secondary glaucoma. One month after the performance of a smooth iridectomy, which at once relieved the pain and inflammatory symptoms, a small, absolute central scotoma appeared. The ophthalmoscope revealed that this had been caused by a dark, venous-colored hemorrhage, exactly replacing the dark area of the macula. Four weeks later, the hemorrhage disappeared, leaving but a faint discoloration to mark its former position, vision returning to its previous sharpness. The second case was seen in a sixty-six-year-old woman, the subject of chronic cardiac disease. Here a less dark-colored, similarly-placed hemorrhage, containing a few white dots in its centre, could be seen oph-

thalmoscopically in the left eye. There was an absolute central scotoma. The third case was seen in a sixty-three-year-old syphilitic. There was a history of a gummatous iridocyclitis of the right eye necessitating enucleation and a parenchymatous iritis in the left eye. In April of 1895, Dr. Oliver discovered a series of hemorrhagic extravasations in the retina, with an unusually large one seated just below the macular region. In six months' time Dr. de Schweinitz found that these were absorbed, leaving a greenish-white area with a dirty-gray circumference, from the temporal edge of which a white line extended and terminated in some yellowish spots.

Dr. Oliver exhibited water-color sketches of the ophthalmoscopic appearances of the third case during the hemorrhagic and the earlier degenerative stages, made for him by Miss Washington.

Dr. S. D. Risley gave the brief notes of a thirteen-year-old apparently healthy child, who presented a dense red macular hemorrhage in the left eye. In this case there was a central scotoma present.

CHARLES A. OLIVER,
Clerk of Section.

PERISCOPE.

NEWS AND MISCELLANY.

Dietetic Fads.

The lean-meat diet possesses certain advantages which unquestionably commend it to practical physicians, and reconcile patients to the use of a dietary which is naturally that of a carnivorous animal, and not of a frugivorous homo. The starved dyspeptic whose yeast stomach has been in a ferment for months or years, finds comfort and peace on a diet of lean meat, and is content to deny his natural craving for breads and fruits for the sake of the relief experienced. If nothing more were to be said with reference to the lean-meat diet, its popularity would be fully justified, and we might all become carnivorous in our eating with advantage, at least so far as ourselves are concerned, although it might result in the extermination of our cattle; but there is much more to be said on the subject.

Professor Bouchard, in his work on auto-intoxication, mentions an experiment in which the injection of a small amount of meat juice into a rabbit caused almost instant death. We have verified this experiment with the same results. Professor Bouchard likewise experimented with solutions of fecal matters, and found that the fecal matters of a carnivorous animal were much more deadly than those of a vegetable-eating animal. If this is true of

the fecal matters, it ought also to be true of the flesh, for the tissues of an animal are more or less saturated with the substances to be found in the alimentary canal, whether toxic or otherwise. The writer accordingly made the following comparative experiment:—

Having obtained an equal quantity of beef juice and juice from the flesh of a dog—both obtained in the same way, by mere compression,—the toxicity of the two extracts was determined by injection into the veins of a rabbit after the method for determining urinary toxicity developed by Professor Bouchard. A careful comparison of the quantity required to produce death with the weight of the animal, the quantity being reduced in each case to the amount required to kill a kilogram of rabbit, showed that the toxicity of the dog extract was just twice that of the beef extract. It is evident that the tissues of a man living upon a lean-meat diet must be in a condition akin to that of the dog, and for the same reasons; namely the constant presence of toxic substances in lean meat and the development of ptomaines and other poisonous substances from meat as the result of decomposition in the alimentary canal. In fact, the systemic poisoning must be greater in the case of man than in that of the dog, for the reason that the dog's stomach produces much more powerful gastric juice than does the human stomach, and hence is better adapted to the digestion of

meat and the prevention of the formation of ptomaines during digestion.

Practical experience, as well as theoretical considerations lead to the conclusion that a lean-meat diet, continued for any great length of time, is incompatible with the highest health. For example, the leading medical teachers in France have for several years been sounding the note of warning against the use of an exclusive meat diet in diabetes, a disease for which lean meat was formerly supposed to be not only highly essential, but almost a panacea. A close study of the history of these cases has shown, however, that an exclusive meat diet is not infrequently a cause of death, through the accumulation of so great a quantity of ptomaines within the body that the overworked kidneys are unable to cope with them.

Dr. Lauder Brunton, the eminent teacher of therapeutics in St. Bartholomew's Hospital, London, has recently called attention to the fact that vegetarian Hindus rarely die under chloroform anesthesia, while deaths of meat-eating Englishmen from this cause are frequently reported. He thinks death is due not to the anesthetic directly, but to the fact that under the influence of chloroform the kidneys cease to eliminate the poisons, so that death results from their accumulation. Exactly in line with this thought is the observation recently reported by a German investigator, that while jaundice may be easily produced in dogs by the injection of various substances into the circulation, even so simple a substance as distilled water, the same result is not produced in rabbits; and the experiment also fails in dogs which have been fed upon bread and milk instead of a meat diet. The same author also remarks that jaundice is frequently to be observed in old dogs, a fact which he attributes to the ordinary diet of the animal.

The observations of Vigoroux and Bouchard, which have shown the intimate relation between the uric acid diathesis and neurasthenia, and of Dana, respecting the influence of ptomaines absorbed from the alimentary canal upon the development of organic nervous disorders, are also worthy of mention in this connection. The ill-smelling fecal matters of a carnivorous animal, and of a human being when subsisting on a diet largely consisting of meat, are evidence of the putrefactive processes which are taking place in the intestine, and the systemic poisoning to which the individual is subjected. Physiological facts which are known to-day fully justify the statement that a person subsisting upon a lean-meat diet, however comfortable he may be, however much relieved from various digestive inconveniences to which he may have been previously subject, is, nevertheless, in a pathological state, and one which is vastly more serious than the conditions which ordinarily arise from the simple fermentation or souring of saccharine or farinaceous foods in the stomach. The acids developed by such fermentations are irritating, and produce more or less disturb-

ance, local and reflex; nevertheless, the ultimate effects are by no means so formidable as those of the insidious but far-reaching and tissue-changing poisons which accumulate in the body as the result of a lean-meat diet.

We are not speaking at random in reference to this matter, nor from prejudice, neither without having made a careful, practical trial of the lean-meat diet, and that in a large number of cases during a series of years; and we are fully persuaded of the gravity of the facts to which attention has been called. The truth seems to be that a person subsisting upon a lean-meat diet, while he may manifest a greater amount of strength than upon a more natural dietary, and may be unconscious of any abnormal condition, is like a person in a powder magazine—he is in constant danger of vital catastrophe. The poison-destroying functions of his liver and the poison-eliminating capacity of his kidneys are taxed to their utmost to keep the proportion of ptomaines and leucomaines in the tissues down to a point which permits of the performance of the vital functions. The margin of safety which nature has wisely made very large in order to provide for emergencies, is reduced to the narrowest possible limit, so that anything which temporarily interferes with the functions of the liver or the kidneys, or which imposes additional work upon them, may be sufficient to obliterate the safety margin, and produce an attack of grave or fatal disease. Invasion of the body by ptomaine-producing microbes, such as the typhoid bacillus, the bacillus of diphtheria, the pneumococcus of Friedlander; the shocks resulting from accident, and even the depression of a severe cold, or the necessity for the administration of an anesthetic, may be sufficient to consume the meager emergency capital; and the result is acute inflammation of the kidneys, or death under chloroform or from shock following an operation under anesthesia.

Dr. Price, perhaps the most brilliant abdominal surgeon in America, has recently announced the theory that death from so-called "shock" after a surgical operation is really death from submergence in ether. Dr. Lauder Brunton would insist, however, that it is not the ether which kills, but the leucomaines and ptomaines which, under the influence of ether, the system is unable to destroy or eliminate.

It is evidently the duty of the physician who places his patient upon a lean-meat diet, to inform him of the fact that under such a dietary he is living close to the border-line; that his situation is like that of a man walking along the brink of a precipice; that he must on no account submit himself to the influence of an anesthetic without first undergoing a few days' preparation, including an entire change of diet; and the truly wise physician will further instruct his patient that however a lean-meat diet may be considered as a temporary expedient, it cannot be safely adopted as a continuous dietary without the risk of constitutional degradation and injury.

In another paper the writer has shown the advantages of a non-flesh dietary as a preparation for a severe surgical operation, particularly in abdominal surgery. Dr. Salisbury and his disciples seem to have recognized partly, if not as an abstract proposition, the danger of ptomaine poisoning.

Marks, the Inventor of Rubber Feet has introduced an improvement which while very simple is of great value.

The new invention consists of the insertion of a mattress of canvas in which is imbedded side by side a layer of narrow, flat, steel springs. The canvas holds them in the pocket, in which they slide freely, and the ends are capped with metal to prevent their perforating the rubber and leaving their proper bed.

The rubber which rests above this mattress is spongy, containing, therefore, a large percentage of air, increasing the lightness and also the flexibility of the foot. Further, just above the posterior end of the mattress in the heel there is a large air chamber so arranged that it cannot burst, and thus preventing the heel from matting or failing in elasticity.

The operation of this steel spring mattress is to throw the toe back as it is bent in walking, and thus to materially assist in locomotion.

This mechanism has been submitted to the most severe mechanical test, and found to be so durable that after being tested equal to 10,000 miles of actual walking to show no signs of giving way.

By this improvement the foot is also lightened, and now weighs from eight to sixteen ounces less than any other made, varying according to the weight of the person wearing the limb.

St. Louis as a Medical Center.

"There is nothing succeeds like success!" How well this quaint old Celticism applies to the medical growth of the "Future Great City of the World," has been demonstrated with emphasis profound during the Semester of Medical Colleges now drawing to a close. Despite the rigid restrictions of an iron-clad Board which has firmly held the reins in the race for preferment, to their credit and honor be it said, however hard it hits, despite the hardness of the times, the gold and silver conflicts, wars and rumors of war, there never was known in the history of the great West such a wonderful afflux of students to this long recognized medical and surgical center as we have witnessed during the session of 1895-'96. It seems to afford our Eastern brethren considerable amusement to refer to the large number of medical colleges and medical journals in the city of St. Louis. When they, however, in their efforts to invest with ridicule our institutions on account of their number and incidentally speak of the centralization policy of European institutions, they but show gross ignorance of educational meth-

ods. Do they know how many colleges go to make up Oxford or Cambridge? Do they know how many institutions come under the head of the London University, of the Paris University, of the University of Berlin? St. Louis, as it stands to-day, is a great University, with every phase of science taught under every system, by every class and order of instructors, and a man who comes here for his medical *cultus* has the privilege of hearing every department of medical science discussed in varied style under different methods, and in the light of the highest competition, a condition greatly conducive to, if not absolutely necessary, to success. Every single institution is well patronized and prosperous. A spirit of generous rivalry is fast taking the place of childish backbiting and canine snarl-ishness. Our great Medical Society is bringing together upon the lofty plane of scientific discussion the best and noblest elements of the medical profession. Personal feuds are forgotten in the search for truth, where honest effort takes precedence of fictitious fraud and boisterous bombast. Indeed, taken altogether, the scholastic year just closing is by every indication the *avant courier* of a manifest destiny that will crown with glory the medical history of this great educational center.

Contagious Diseases in Pennsylvania.

Since the last report of February 20th, 1896:

Small-pox has been reported at Maltby, Luzerne County, two cases, no deaths; at Priceville, Lackawanna County, one case, no death. The case previously reported at Brookville, Jefferson County, proved to be rhus poisoning.

Cerebro-Spinal-Meningitis at Philadelphia, one case, no death; at Catasauqua, Lehigh County, one case, no death; at Allentown, Lehigh County, four cases, three deaths; at South Bethlehem, Northampton County, two cases, two deaths.

Diphtheria at Philadelphia, 558 cases, 174 deaths.

The following is the report of a very serious epidemic of Scarlet Fever which it is hoped is about at an end in Coal Township, adjoining the borough of Shamokin, Northumberland County. The population of this township is about ten thousand, principally miners.

MONTH.	CASES REPORTED.	DEATHS.
July	19	8
August	18	8
September	30	6
October	40	12
November	28	6
December	16	3
January	19	5
February	24	11
March	8	1
Total	202	60